

better understanding of the processes going on within the atmosphere, and it is evidently the duty of the Weather Bureau to foster and respond to such desires to the best of its ability. The study of meteorology is just beginning to be considered as a course proper for high schools and colleges, but the difficulty is everywhere felt that properly educated teachers are not available. Under these circumstances the best that can be done consists in entrusting the teaching of both elementary and advanced meteorology to those whose training in experimental and mathematical physics has fitted them to appreciate the minor points, and conquer the major difficulties of the subject. As to those who can not attend academies and colleges, including many of the regular and

voluntary observers of the Weather Bureau, the best course for them will be to pursue systematically either a general course of home study or a special course adapted to their individual difficulties. To both the young instructor and the older observers it may be appropriate to state that the Chief of the Weather Bureau is in hearty sympathy with them in both their desires and their difficulties, and hopes that if in any way the Editor can, by correspondence, be useful to them, they will freely address themselves to him.

When the "Laboratory Manual of Elementary Meteorology," promised by Mr. R. DeC. Ward, has been published, we shall, undoubtedly, have a book that will largely replace the correspondence method of study.

METEOROLOGICAL TABLES AND CHARTS.

By A. J. HENRY, Chief of Division of Records and Meteorological Data.

Table I gives, for about 130 Weather Bureau stations making two observations daily and for about 20 others making only one observation, the data ordinarily needed for climatological studies, viz., the monthly mean pressure, the monthly means and extremes of temperature, the average conditions as to moisture, cloudiness, movement of the wind, and the departures from normals in the case of pressure, temperature, and precipitation, the total depth of snowfall, and the mean wet-bulb temperatures. The altitudes of the instruments above ground are also given.

Table II gives, for about 2,700 stations occupied by voluntary observers, the highest maximum and the lowest minimum temperatures, the mean temperature deduced from the average of all the daily maxima and minima, or other readings, as indicated by the numeral following the name of the station; the total monthly precipitation, and the total depth in inches of any snow that may have fallen. When the spaces in the snow column are left blank it indicates that no snow has fallen, but when it is possible that there may have been snow of which no record has been made, that fact is indicated by leaders, thus (....).

Table III gives, for about 30 stations furnished by the Canadian Meteorological Service, Prof. R. F. Stupart, director, the means of pressure and temperature, total precipitation and depth of snowfall, and the respective departures from normal values, except in the case of snowfall.

Table IV gives, for 26 stations selected out of 113 that maintain continuous records, the mean hourly temperatures deduced from the Richard thermographs described and figured in the Report of the Chief of the Weather Bureau, 1891-92, p. 29.

Table V gives, for 26 stations selected out of 104 that maintain continuous records, the mean hourly pressures as automatically registered by Richard barographs, except for Washington, D. C., where Foreman's barograph is in use. Both instruments are described in the Report of the Chief of the Weather Bureau, 1891-92, pp. 26 and 30.

Table VI gives, for about 130 stations, the arithmetical means of the hourly movements of the wind ending with the respective hours, as registered automatically by the Robinson anemometer, in conjunction with an electrical recording mechanism, described and illustrated in the Report of the Chief of the Weather Bureau, 1891-92, p. 19.

Table VII gives, for all stations that make observations at 8 a. m. and 8 p. m., the four component directions and the resultant directions based on these two observations only and without considering the velocity of the wind. The total movement for the whole month, as read from the dial of the Robinson anemometer, is given for each station in Table I. By adding the four components for the stations comprised in

any geographical division the average resultant direction for that division can be obtained.

Table VIII gives the total number of stations in each State from which meteorological reports of any kind have been received, and the number of such stations reporting thunderstorms (T) and auroras (A) on each day of the current month.

Table IX gives, for about 70 stations, the average hourly sunshine (in percentages) as derived from the automatic records made by two essentially different types of instruments, designated, respectively, the thermometric recorder and the photographic recorder. The kind of instrument used at each station is indicated in the table by the letter T or P in the column following the name of the station.

Table X gives a record of rains whose intensity at some period of the storm's continuance equaled or exceeded the following rates:

Duration, minutes..	5	10	15	20	25	30	35	40	45	50	60	80	100	120
Rates pr. hr. (ins.)..	3.00	1.80	1.40	1.20	1.08	1.00	0.94	0.90	0.86	0.84	0.75	0.60	0.54	0.50

In the northern part of the United States, especially in the colder months of the year, rains of the intensities shown in the above table seldom occur. In all cases where no storm of sufficient intensity to entitle it to a place in the full table has occurred, the greatest rainfall of any single storm has been given, also the greatest hourly fall during that storm.

Table XI gives the record of excessive precipitation at all stations from which reports are received.

NOTES EXPLANATORY OF THE CHARTS.

Chart I.—Tracks of centers of high pressure. The roman letters show number and order of centers of high areas. The figures within the circles show the days of the month; the letters *a* and *p* indicate, respectively, the 8 a. m. and 8 p. m., seventy-fifth meridian time, observations. The queries (?) on the tracks show that the centers could not be satisfactorily located. Within each circle is given the highest barometric reading reported near the center. A blank indicates that no reports were available. A wavy line indicates the axis of a ridge of high pressure.

Chart II.—Tracks of centers of low pressure. The roman letters show number and order of centers of low areas. The figures within the circles show the days of the month; the letters *a* and *p* indicate, respectively, the 8 a. m. and 8 p. m., seventy-fifth meridian time, observations. The queries (?) on the tracks show that the centers could not be satisfactorily located. Within each circle is given the lowest barometric reading reported near the center. A blank indicates that no reports were available. A wavy line indicates the axis of a trough or long oval area of low pressure.

Chart III.—Total precipitation. The scale of shades showing the depth of rainfall is given on the chart itself. For isolated stations the rainfall is given in inches and tenths, when appreciable; otherwise, a "trace" is indicated by a capital T, and no rain at all, by 0.0.

Chart IV.—Sea-level isobars and isotherms, and resultant winds. The wind directions on this Chart are the computed resultants of observations at 8 a. m. and 8 p. m., daily; the resultant duration is shown by figures attached to each arrow. The temperatures are the means of daily maxima and minima and are reduced to sea level. The pressures are the means of 8 a. m. and 8 p. m. observations, daily, and are reduced to sea level and to standard gravity. The reduction for 30 inches of the mercurial barometer, as formerly shown by the marginal

figures for each degree of latitude, has already been applied.

Chart V.—Hydrographs for seven principal rivers of the United States.

Chart VI.—Surface temperatures; maximum, minimum, and mean. Lines of equal monthly mean temperature in red; lines of equal maximum temperatures (broken) in black; and lines of equal minimum temperature (dotted) also in black.

Chart VII.—Percentage of sunshine. The average cloudiness at each Weather Bureau station is determined by numerous personal observations during the day. The difference between the observed cloudiness and 100, it is assumed, represents the percentage of sunshine, and the values thus obtained have been used in preparing Chart VII.

TABLE I.—Climatological data for Weather Bureau Stations, June, 1898.

Stations.	Elevation of instruments above sea level, feet.		Pressure, in inches.		Temperature of the air, in degrees Fahrenheit.										Precipitation, in inches.		Wind.		Maximum velocity.				
	Barometer above sea level, feet.		Thermometers above ground.		Mean actual, 8 a.m. and 8 p.m. + 2°.					Mean maximum.					Mean minimum.		Greatest daily range.		Departure from normal.				
	Anerometer above ground.		Mean reduced.		Departure from normal.		Mean max. and min. + 2°.		Departure from normal.		Date.		Mean maximum.		Mean minimum.		Mean wet thermometer.		Days with 0° or more.				
New England.																							
Eastport.	76	69	74	29.86	29.95	+ .02	54.3	- 1.2	79	.26	61	43	16	48	30	51	49	87	21	1.47	- 1.4	5.9	
Portland, Me.	103	81	89	29.83	29.93	- .01	61.3	- 2.0	89	.25	54	35	16	54	56	52	77	2.98	+ 0.6	4.984	s.	32	
Northfield.	872	15	65	29.04	29.96	+ .03	62.4	- 1.3	86	.25	54	51	36	55	55	55	75	2.28	- 1.2	5.484	s.	24	
Boston.	125	115	131	29.84	29.98	+ .02	65.8	- 0.5	92	.25	65	44	50	54	58	58	76	1.60	- 1.5	1.12	14.6	3.0	
Nantucket.	14	43	54	29.97	29.98	- .02	59.6	- 1.6	73	.25	66	44	54	54	57	57	76	0.63	- 2.2	8.090	sw.	30	
Woods Hole.	53	51	57	61.0	- 1.4	80	46	56	47	6	56	56	56	56	56	56	91	0.21	- 1.4	9.821	sw.	40	
Vineyard Haven.	20	27	39	48	29.97	30.00	+ .01	60.6	- 1.4	78	.26	71	45	6	56	57	57	87	0.81	- 1.4	10	sw.	25
Block Island.	27	39	48	29.97	30.00	+ .01	66.9	- 0.6	85	.26	71	46	6	56	57	57	87	0.10	- 2.5	5	5	5.3	
Narragansett.	10	107	118	29.87	29.98	- .01	66.9	- 0.4	90	.26	76	47	16	56	58	58	86	1.10	- 1.4	9.821	sw.	38	
New Haven.	140	29	39	29.87	29.98	- .01	66.9	- 0.1	96	.26	71	47	16	56	58	58	87	0.91	- 1.4	9.821	sw.	4	
Mid. Atlan. States.																							
Albany.	97	84	113	29.88	29.99	+ .04	69.9	- 0.9	95	.25	80	48	16	60	60	60	70	5.58	+ 1.3	12	4.694	s.	34
Binghamton.	875	79	90	29.66	29.67	30.00	+ .01	66.8	- 0.5	85	.25	76	56	36	61	61	61	70	2.47	- 1.2	5.5	25	
New York.	314	208	326	29.67	30.00	+ .01	68.9	- 0.1	89	.25	76	53	23	61	61	61	70	1.28	- 1.8	9	7.857	sw.	20
Harrisburg.	377	94	104	29.89	29.90	+ .01	72.4	- 0.7	94	.25	82	53	23	63	63	63	70	1.98	- 2.3	9	4.489	w.	24
Philadelphia.	117	168	184	29.89	30.01	+ .01	66.6	- 0.2	92	.25	82	50	23	63	63	63	70	1.75	- 1.4	9	6.833	sw.	36
Atlantic City.	52	68	76	29.96	30.01	+ .02	67.6	- 0.6	86	.25	82	54	23	63	63	63	70	2.49	- 0.7	10	7.574	sw.	28
Cape May.	24	52	70	30.01	30.03	+ .01	73.8	- 0.3	95	.25	82	53	23	64	64	64	70	1.06	- 3.0	6	3.754	n.	21
Baltimore.	123	68	82	29.98	30.01	+ .01	73.5	- 0.3	95	.25	84	53	23	65	65	65	70	1.33	- 2.7	5	4.062	s.	30
Washington.	112	59	76	29.90	30.02	+ .01	73.5	- 0.3	95	.25	84	53	23	65	65	65	70	2.83	- 1.1	15	se.	....
Cape Henry.	5	34	72	29.66	29.70	+ .01	72.6	- 0.5	102	.26	80	55	23	65	65	65	70	2.98	- 0.5	11	2.610	sw.	13
Lynchburg.	685	83	88	29.32	30.03	+ .01	73.9	- 1.1	94	.26	82	54	23	66	66	66	71	2.98	- 0.5	8	5.496	sw.	28
Norfolk.	57	88	93	29.98	30.04	+ .02	74.0	- 1.1	96	.26	82	55	23	67	67	67	71	2.98	- 0.5	8	4.364	w.	26
Richmond.	144	98	105	29.90	30.02	+ .01	73.5	- 0.3	95	.25	84	55	23	65	65	65	70	1.33	- 2.7	5	4.062	s.	28
S. Atlantic States.																							
Charlotte.	773	68	76	29.23	30.02	- .01	77.7	- 0.5	97	.26	88	58	23	67	67	67	76	3.82	- 1.8	15	....	....	4.1
Hatteras.	11	17	36	30.03	30.04	+ .01	77.2	- 1.8	84	.26	76	56	23	68	68	68	76	3.27	- 1.3	8	9.689	s.	42
Kittyhawk.	9	12	30	29.79	30.07	+ .03	71.2	- 3.0	95	.26	76	57	23	64	64	64	76	4.85	+ 0.2	11	10.619	....	16
Raleigh.	375	93	101	29.65	30.04	+ .01	76.0	- 0.3	97	.25	82	56	23	65	65	65	76	3.28	- 2.3	10	4.308	sw.	26
Wilmington.	78	82	90	29.98	30.06	+ .03	77.0	- 0.3	94	.25	86	56	23	66	66	66	76	4.59	- 1.1	10	5.835	sw.	28
Charleston.	48	14	92	30.05	30.10	+ .06	80.0	- 0.9	94	.25	86	57	23	67	67	67	76	4.68	- 1.0	10	7.458	s.	35
Columbia.	5	12	20	29.99	30.05	+ .05	80.4	- 2.3	99	.25	93	61	23	66	66	66	76	3.12	- 1.0	9	....	....	13
Augusta.	180	89	103	29.85	30.04	+ .03	80.6	- 1.8	97	.26	90	61	23	66	66	66	76	3.92	- 0.7	11	4.117	se.	36
Savannah.	82	63	89	29.79	30.07	+ .03	80.4	- 1.1	94	.26	92	61	23	66	66	66	76	4.58	- 2.0	8	5.399	s.	38
Jacksonville.	43	69	84	30.03	30.08	+ .04	81.4	- 1.3	96	.26	91	64	23	67	67	67	76	3.27	- 3.3	8	5.463	sw.	17
Florida Peninsula.																							
Jupiter.	28	13	30	30.06	30.09	+ .04	79.4	- 0.4	89	.26	86	58	23	67	67	67	76	2.19	- 6.5	3	6.050	se.	25
Key West.	32	43	50	30.05	30.07	+ .03	82.5	- 0.6	89	.26	87	61	23	70	70	70	76	2.44	- 1.6	15	6.107	se.	22
Tampa.	36	60	67	30.04	30.08	+ .04	80.8	- 0.8	95	.26	91	64	23	70	70	70	76	5.17	- 1.6	15	4.180	se.	27
East Gulf States.																							
Atlanta.	1,131	92	126	28.89	30.04	- .01	79.2	- 3.5	95	.26	90	65	23	70	70	70	76	0.89	- 3.4	8	5.497	sw.	30
Pensacola.	56	78	90	30.00	30.06	+ .03	81.0	- 1.6	91	.26	90	65	23	70	70	70	76	2.88	- 2.5	8	5.841	sw.	44
Mobile.	57	88	96	30.00	30.06	+ .04	80.2	- 0.5	91	.26	86	65	23	71	71	71	76	4.86	- 1.0	12	4.800	sw.	38
Montgomery.	221	100	112	29.80	30.03	- .00	81.7	- 2.3	98	.26	92	65	23	71	71	71	76	1.41	- 3.3	10	4.531	sw.	31
Vicksburg.	247	65	73	29.76	30.02	- .00	79.5	- 0.3	93	.26	86	64	23	72	72	72	76	6.17	+ 1.9	15	3.867	se.	30
New Orleans.	54	112	120	29.99	30.05	+ .05	81.1	- 0.8	91	.26	94	61	23	73	73	73	76	3.79	- 2.1	15	4.744	se.	34
Port Eads.	27	....	....	....	....	....	81.5	- 1.6	90	.26	97	62	23	73	73	73	76	1.07	- 3.1	5	....	....	0
West Gulf States.																							
Shreveport.	249	77	84	29.99	30.00	- .00	78.8	- 2.7	95	.26	92	63	23	73	73	73	76	7.25	+ 3.5	16	4.175	se.	31
Fort Smith.	481	63	72	29.46	29.95	- .00	78.8	- 2.7	93	.26	92	64	23	71	71	71	76	3.45	+ 1.3	12	3.844	e.	34
Little Rock.	302	71	79	29.69	30.00	+ .02	79.4	- 2.4	91	.26	92	64	23	72	72	72	76	3.03	- 1.3	12	4.084	s.	40
Corpus Christl.	20	42	50	29.94	29.96	- .02	80.1	- 0.2	88	.26	92	64	23	71	71	71	76	2.44	- 0.3	17	9.773	se.	34
Galveston.	42	85	96	29.95	29.99	- .00	81.0	- 0.6	93	.26	92	64	23	72	72	72	76	1.94	- 2.9	17	6.630	s.	32
Palestine.	510	54	61	29.45	29.98	- .01	78.6	- 0.4	90	.26	92	64	23	73	73	73	76	5.50	+ 1.2	18	4		

TABLE I.—Climatological data for Weather Bureau Stations, June, 1898—Continued.

Stations.	Elevation of instruments		Pressure, in inches.		Temperature of the air, in degrees Fahrenheit.										Precipitation, in inches.		Wind.																	
	Barometer above sea-level, feet.		Thermometers above ground.		Mean actual, 8 a.m. and 8 p.m. + 2.					Mean reduced.					Mean max. and min. + 2.		Departure from normal.		Mean maximum.		Mean minimum.		Greatest daily range.		Mean wet thermometer.		Mean relative humidity, per cent.		Total movement, miles.		Prevailing direction.		Maximum velocity.	
	Anemometers above ground.																																	
Up. Miss. Val.—Con.																																		
Dubuque	698	101	109	29.22	29.95	+ .01	71.1	+ 1.6	90	24	24	24	24	24	24	52	64	62	62	62	62	62	4.36	se.	28	sw.	25	9	12	9	5.5			
Keokuk	614	64	78	29.32	29.96	+ .02	75.6	+ 3.1	91	24	24	24	24	24	24	61	74	74	74	74	74	74	4.77	se.	36	sw.	33	15	7	8	4.4			
Cairo	359	87	93	29.61	29.98	+ .01	78.0	+ 2.6	91	24	24	24	24	24	24	63	74	74	74	74	74	74	4.64	s.	40	w.	35	6	17	4	5.3			
Springfield, Ill.	644	82	92	29.31	29.98	+ .01	74.3	+ 2.1	91	24	24	24	24	24	24	60	74	74	74	74	74	74	4.84	sw.	25	s.	27	9	14	5	4.6			
Hannibal	534	75	107				75.3	+ 2.9	91	24	24	24	24	24	24	61	74	74	74	74	74	74	4.82	sw.	40	w.	37	15	11	4	3.8			
St. Louis	567	111	210	29.39	29.98	+ .02	77.8	+ 2.6	91	24	24	24	24	24	24	63	74	74	74	74	74	74	5.14	s.	37	sw.	25	18	15	8	5.4			
Missouri Valley.							72.8	+ 1.3	91	24	24	24	24	24	24	63	74	74	74	74	74	74	4.60	sw.	25	s.	25	15	15	7	4.9			
Columbia	963	4	84				75.6	+ 1.2	92	24	24	24	24	24	24	65	74	74	74	74	74	74	5.02	s.	40	n.w.	30	12	16	7	5.6			
Kansas City	963	78	95	28.97	29.96	+ .02	76.0	+ 2.6	93	24	24	24	24	24	24	66	74	74	74	74	74	74	5.189	se.	30	n.w.	27	14	11	11	5.5			
Springfield, Mo.	1,324	100	103	29.60	29.98	+ .00	74.0	+ 1.6	92	24	24	24	24	24	24	63	74	74	74	74	74	74	5.60	s.	40	w.	35	12	13	5	5.3			
Topeka	81						75.6	+ 2.4	92	24	24	24	24	24	24	60	74	74	74	74	74	74	4.76	sw.	25	s.	27	9	14	4	4.6			
Lincoln	1,199	74	84	28.66	29.90	- .01	73.5	+ 2.4	92	24	24	24	24	24	24	63	74	74	74	74	74	74	4.83	sw.	40	w.	37	15	11	4	3.8			
Omaha	1,103	92	97	28.78	29.91	- .00	73.9	+ 2.4	92	24	24	24	24	24	24	65	74	74	74	74	74	74	4.85	s.	37	sw.	25	18	15	8	5.4			
Sioux City	1,139	96	164				71.0	+ 0.7	91	24	24	24	24	24	24	61	71	71	71	71	71	71	3.99	s.	34	n.	4	12	12	7	4.9			
Pierre	1,460	50	62	24.37	29.87	+ .01	70.4	+ 2.2	91	24	24	24	24	24	24	66	74	74	74	74	74	74	6.11	s.	34	n.	30	14	13	3	3.9			
Huron	1,306	56	67	28.53	29.90	- .00	67.4	+ 0.7	91	24	24	24	24	24	24	60	75	75	75	75	75	75	5.48	s.	34	n.	30	14	13	4	4.8			
Yankton	1,234	52	58				70.3	+ 1.7	91	24	24	24	24	24	24	66	74	74	74	74	74	74	4.76	s.	44	s.	34	14	13	9	4.7			
Northern Slope.							62.9	+ 0.1	91	24	24	24	24	24	24	58	64	64	64	64	64	64	2.24	s.	34	s.	32	12	13	5	4.4			
Havre	2,494	46	47	27.29	29.86	- .00	61.1	- 0.2	91	24	24	24	24	24	24	50	58	58	58	58	58	58	1.81	s.	40	sw.	32	12	13	5	4.4			
Miles City	2,372	41	49	27.42	29.86	+ .01	65.6	- 1.4	92	24	24	24	24	24	24	53	64	64	64	64	64	64	1.99	s.	40	w.	34	12	13	5	4.8			
Helena	4,108	89	93	25.84	29.98	+ .08	58.5	- 0.9	91	24	24	24	24	24	24	53	64	64	64	64	64	64	5.53	s.	38	n.w.	30	12	13	9	4.3			
Rapid City	3,251	46	50	26.58	29.85	- .03	65.6	+ 1.4	91	24	24	24	24	24	24	55	64	64	64	64	64	64	3.52	s.	35	n.w.	30	12	13	5	4.6			
Cheyenne	6,105	58	60	24.05	29.88	+ .02	61.2	+ 0.3	91	24	24	24	24	24	24	54	64	64	64	64	64	64	0.50	s.	39	w.	30	12	13	3	3.7			
Lander	5,372	28	36	24.66	29.98	+ .07	59.8	+ 0.7	91	24	24	24	24	24	24	53	64	64	64	64	64	64	3.02	s.	30	n.w.	27	12	13	3	3.4			
North Platte	2,826	43	52	27.05	29.92	+ .03	68.4	+ 0.5	91	24	24	24	24	24	24	55	64	64	64	64	64	64	2.54	s.	36	n.w.	26	12	13	3	4.5			
Middle Slope.							72.8	+ 1.2	91	24	24	24	24	24	24	58	64	64	64	64	64	64	2.92	s.	34	s.	32	12	13	5	4.0			
Denver	5,290	79	151	24.75	29.90	+ .06	67.0	+ 0.6	98	24	24	24	24	24	24	53	64	64	64	64	64	64	0.94	s.	41	s.	38	11	15	4	4.4			
Pueblo	4,713	74	81	25.27	29.88	+ .05	68.9	+ 0.6	101	24	24	24	24	24	24	57	64	64	64	64	64	64	1.34	s.	38	n.w.	30	12	13	5	4.7			
Concordia	1,398	43	47	25.46	29.89	- .02	75.0	+ 2.7	99	24	24	24	24	24	24	55	64	64	64	64	64	64	3.65	s.	36	n.w.	30	12	13	4	4.0			
Dodge	2,504	44	52	27.36	29.88	+ .02	73.5	+ 0.9	96	24	24	24	24	24	24	53	64	64	64	64	64	64	0.50	s.	39	w.	30	12	13	5	4.6			
Wichita	1,351	78	85	25.53	29.92	+ .04	75.6	+ 1.7	94	24	24	24	24	24	24	59	64	64	64	64	64	64	5.24	s.	36	n.w.	30	12	13	5	3.9			
Oklahoma	1,218	54	62	28.03	29.93	+ .01	76.8	+ 0.4	93	24	24	24	24	24	24	62	71	71	71	71	71	71	1.75	s.	36	s.	34	12	13	3	3.8			
Southern Slope.							74.2	+ 1.2	91	24	24	24	24	24	24	58	64	64	64	64	64	64	4.68	s.	34	s.	32	12	13	5	3.8			
Abilene	1,749	45	54	24.16	29.94	+ .02	77.8	- 0.6	98	24	24	24	24	24	24	61	68	68	68	68	68	68	4.55	s.	42	n.e.	36	11	16	3	4.3			
Amarillo	3,691	54	61	26.25	29.91	+ .01	70.7	- 1.7	93	24	24	24	24	24	24	53	60	60	60	60	60	60	4.81	s.	50	n.	36	10	16	3	3.2			
Southern Plateau.							77.6	+ 0.3	91	24	24	24	24	24	24	55	64	64	64	64	64	64	0.42	s.	34	s.	32	12	13	5	3.2			
El Paso	3,767	10	110	26.13	29.84	+ .02	76.9	- 3.3	102	24	24	24	24	24	24	53	64	64	64	64	64	64	7.187	e.	48	n.w.	36	12	13	1	2.7			
Santa Fe	6,998	47	50	23.32	29.90	+ .01	64.2	+ 0.9	91	24	24	24	24	24	24	41	58	58	58	58	58	58	0.46	s.	38	n.e.	30	12	13	6	4.1			
Phoenix	1,076	47	57	28.65	29.74	- .06	84.8	+ 1.0	110	24	24	24	24	24	24	57	64	64	64	64	64	64	0.58	s.	39	w.	30	12	13	5	1.8			
Yuma	139	16	50	29.58	29.72	- .06	84.7	+ 0.2	112	24	24	24	24	24	24	58	64	64	64	64	64	64	0.00	s.	34	n.	32	12	13	2	1.0			
Independence	3,907	10	58	25.90	29.73	- .00	74.2	+ 0.9	*	24	24	24	24	24	24	38</																		

TABLE II.—*Meteorological record of voluntary and other cooperating observers, June, 1898.*

Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.	
	Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.
<i>Alabama.</i>						<i>Arizona—Cont'd.</i>						<i>California—Cont'd.</i>					
Alex t.....	98	64	79.3	Ins.	5.31	Texas Hill *1.....	117	75	91.4	0.12	Ins.	Escondido.....	102	40	68.4	Ins.	Ins.
Ashville t.....	100	57	80.2	2.97		Tombstone.....	99	55	77.4	0.28		Fallbrook.....	102	40	68.4	0.00	0.07
Bermudat.....	98	63	80.2	3.37		Tucson c t.....	106*	58	83.2*	0.20		Folsom City *1.....	106	55	75.7	0.30	2.13
Birmingham t.....	98	63	81.0	4.35		Walnut Grove.....	.....	.....	.....	0.11		Fordyce Dam.....	.....	.....	.....	0.25	2.0
Bridgeport t.....				2.33		White Hills.....	109	57	85.5	T.		Fort Bragg t.....	105	40	65.4	0.04	
Citronelle t.....	94	70	80.8	4.16		Willcox *1.....	98	68	82.2	0.03		Fort Romie.....	83	45	57.8	0.63	
Clanton t.....	96	63	79.9	2.05		<i>Arkansas.</i>						Georgetown.....	94	40	67.0	1.23	
Daphne.....	94	67	81.6	4.43		Amity.....	91	64	78.0	6.08		Goshen *1.....	106	59	82.0	0.00	
Decatur t.....	103	57	79.8	1.65		Arkansas City t.....	.....	.....	.....	5.75		Grand Island *1.....	102	48	75.3	0.00	
Demopolis.....				6.72		Beebranch.....	94*	60*	77.6*	2.47		Grass Valley.....	91	30	58.5	1.27	
Elba.....	95	60	79.2	5.84		Blanchard Springs t.....	96	65	79.0	7.05		Greenville t.....	90	40	62.6	2.39	
Eufaula c t.....	100	66	82.4	2.08		Brinkley.....	94	65	80.3	4.38		Healdsburg *1.....	90	40	62.6	0.41	
Evergreen.....	94	67	78.7	7.99		Camden a t.....	92	65	78.9	4.23		Hill Ranch.....	106	44	72.4	T.	
Florence b t.....				2.30		Camden b t.....	92	65	78.9	4.08		Hollister *1.....	103	41	65.0	0.00	
Florence b t.....	95	61	79.5	2.01		Canton *1.....	94	68	79.0			Humboldt L. H.....	.....	.....	.....	1.13	
Fort Deposit.....	97	65	81.8	5.80		Conway.....	99	67	81.4	5.52		Hylesville.....	84	42	58.8	1.13	
Gadsden.....	99	58	79.8	1.16		Corning.....	98	62	78.5	3.33		Indio *1.....	113	60	87.9	0.00	
Goodwater.....	99	60	81.0	4.92		Dallas.....	93	63	78.0	4.05		Iowa Hill *1.....	89	45	67.0	1.49	
Greensboro t.....	95	68	80.8	5.97		Dardanelle.....	.....	.....	.....	5.81		Jackson.....	96	40	69.4	0.43	
Hamilton.....	100*	61	80.0*	2.26		Elon t.....	95	66	79.2	7.71		Jolon.....	.....	.....	.....	T.	
Healing Springs.....	96	62	78.8	5.53		Fayetteville t.....	91	61	75.4	5.69		Keene *1.....	96	49	69.8	0.00	
Highland Home t.....	93	68	80.0	5.09		Forrest.....	94	65	78.8	3.50		Kennedy Gold Mine.....	98	41	68.8	0.30	
Livingston.....	99	68	81.1	5.74		Fulton t.....	96	64	79.7	7.82		King City *1.....	104	45	60.7	.....
Lock No. 4.....	100	61	79.8	5.27		Hardy.....	95	64	77.9	3.35		Kingsburg *1.....	105	60	80.4	0.00	
Madison Station t.....	100	55	78.2	0.93		Helena a t.....	98	67	81.6	3.11		Lagrange *5.....	107	49	78.3	0.00	
Maplegrove.....	100	60	79.0	4.52		Helena b.....	98	67	81.6	2.48		Laporte *1.....	80	34	56.5	2.73	7.0
Mariot t.....	102	60	82.0	4.00		Hot Springs a.....	95	62	79.6	5.23		Lemoore a *1.....	105	56	72.0	0.00	
Mount Willing t.....	98	60	81.3	4.20		Hot Springs b.....	.....	.....	.....	5.6		Lick Observatory.....	85	33	62.0	0.38	
Newbern t.....	96	70	82.2	4.09		Jonesboro.....	96	64	79.7	5.29		Limelight.....	108	46	76.8	.....
Newburg.....	101	56	80.8	1.26		Keeses Ferry t.....	93	62	77.2	5.30		Line Point L. H.....	99	48	71.0	0.06	
Newton t.....	95	61	79.2	3.46		Lacrosse t.....	93	64	77.8	4.76		Lodi.....	92	47	65.1	0.23	
Oneonta.....	98	56	77.4	3.59		Lonoke *1.....	100	70	81.1	4.12		Los Gatos b.....	96	46	68.0	0.61	
Opelika t.....	98	63	82.0	1.26		Luna Landing *6.....	95	70	78.9			Lytton Springs.....	92	39	65.7	1.70	
Oxxanna t.....	95	59	76.8	2.88		Malvern t.....	96	62	79.6	3.23		Malakoff Mine.....	92	39	65.7	0.00	
Pineapple.....	100	65	82.4	4.45		Marianna *1.....	96	72	81.6			Mammoth Tank *1.....	116	50	93.5	0.00	
Pushmataha t.....	98	68	82.3	3.60		Marvell.....	97	64	80.9	2.90		Manzana.....	101	44	76.7	.....
Riverton t.....	98	59	79.8	1.06		Mena *1.....	91	67	77.6	5.48		Mare Island L. H.....	.....	.....	.....	0.58	
Rockmills.....	100 ⁱ	64	78.0 ⁱ	1.78		Moore.....	.....	.....	.....	4.72		Merced *1.....	106	58	75.7	0.00	
Scottsboro t.....	98	56	77.2	4.68		Mossville.....	87	60	72.6	9.96		Mills College.....	.....	.....	.....	0.46	
Selma t.....	100	62	82.8	3.59		Mount Nebo.....	86	62	75.0	5.49		Mile.....	.....	.....	.....	0.00	
Surdevant.....				2.71		New Gascony.....	.....	.....	.....	2.49		Milton (near) *1.....	101	52	73.3	0.00	
Talladega.....	99	63	80.6	5.10		Newport a t.....	97	52	79.9	2.35		Modesto *1.....	102	56	73.4	0.00	
Tallasee.....				3.71		Newport b t.....	97	52	79.9	2.06		Mohave *1.....	104	50	80.0	0.00	
Thomasville.....	100	67	82.6	5.81		Oregon *1.....	90	60	72.4			Mokelumne Hill *3.....	51	69.7	0.22		
Tuscaloosa t.....	99	62	82.0	4.43		Osceola.....	98	60	80.4	4.01		Monterey *1.....	92	53	62.1	0.06	
Unlon t.....	98	67	82.5	4.26		Ozark t.....	96	65	79.0	11.15		Mountain View.....	.....	.....	.....	0.09	
Union Springs t.....	101	67	83.0	2.87		Picayune t.....	95	62	78.4	9.59		Mount Frazier.....	86	47	62.0	T.	
Uniontown t.....	97	71	82.4	3.33		Pinebluff t.....	97	63	81.8	2.57		Mount Tamalpais.....	86	38	61.9	1.05	
Valleyhead.....	99	60	82.0	2.43		Pocahontas.....	92	64	77.8	2.64		Napa b.....	102	42	65.7	0.37	
Warrior.....				2.69		Pond.....	89	61	75.0	5.22		Needles.....	113 ⁱ	67	89.4 ⁱ	0.06	
Wetumpka.....	99	64	82.0	2.00		Prescott.....	88	68	80.9	5.80		Nevada City.....	89	38	63.3	1.27	
Wilsonville t.....				3.68		Rison.....	97	60	79.7	4.60		Newhall *1.....	100	55	66.6	0.00	
<i>Arizona.</i>						Russellville.....	95	67	79.6	3.36		North Ontario.....	91	44	67.4	0.00	
Arizona Canal Co. Dam.....	109	66	88.8	T.		Silver Springs t.....	92	61	75.6	5.38		North San Juan *1.....	98	48	69.0	0.74	
Benson *1.....	103	68	84.1	1.57		Spielerville.....	97	63	78.6	4.15		Oakland a.....	89	50	83.7	0.39	
Bisbee t.....	99	50	75.7	1.91		Stamps.....	95	64	80.8*	7.36		Ogilby *1.....	95	47	67.3	0.35	
Buckeye t.....	108	52	81.4	0.10		Stuttgart.....	95	66	80.8	1.85		Oleta *1.....	110	60	81.6	0.00	
Camp Creek.....	102	60	80.0	0.51		Texarkanat.....	98	61	80.8	10.19		Orland *1.....	107	47	76.1	0.12	
Casa Grande *1.....	108	70	88.8	0.60		Warren t.....	95	66	79.8	3.71		Palermo.....	105	36	67.2	0.00	
Champli Camp.....	111	60	85.8	0.50		Washington t ¹	94	70	78.7	5.68		Paso Robles b.....	92	52	65.4	0.41	
Congress.....	104	63	83.0	0.29		Wiggs *1.....	92	69	79.0	6.51		Peachland *5.....	.....	.....	.....	0.10	
Dragoon (Russellville).....				0.32		Winslow.....	86	60	72.6	7.93		Piedras Blancas L. H.....	.....	.....	.....	0.05	
Dragoon Summit *1.....	97	49	79.3	0.52		Witts Springs t.....	90	62	74.2	7.31		Pigeon Point L. H.....	.....	.....	.....	1.61	
Dudleyville.....	108	41	76.0	0.40		<i>California.</i>						Pilot Creek.....	93	50	66.0	0.00	
Empire Ranch.....	100	50	76.0	0.19		Arlington Heights.....	99	47	70.7	0.00		Pine Crest.....	98	39	67.6	0.66	
Flagstaff t.....	96	30	64.2	0.21		Asti.....	105	43	71.0			Placerville.....	98	39	67.6	0.66	
Fort Apache.....	98	38	70.6	2.60		Ballast Point L. H.....	.....	.....	.....	.....		Point Año Nuevo L. H.....	.....	.....	.....	0.00	
Fort Defiance.....	95	31	63.6	0.74		Bear Valley.....	.....	.....	.....	.....		Point Arena L. H.....	.....	.....	.....	0.61	
Fort Grant t.....	98	53	75.2	0.37		Berkeley.....	91	49	63.0	0.24		Point Bonita L. H.....	.....	.....	.....	0.73	
Fort Huachua t.....	99	50	75.1	0.46		Bishop.....	96	43	69.1	T.		Point Conception L. H.....	.....	.....	.....	0.00	
Gilabend a *1.....	114	76	89.8	0.70		Blue Lakes City.....	106	38	71.4	0.22		Point Firmin L. H.....	.....	.....	.....	0.00	
Holbrook t.....	101	34	71.0	0.53		Boca *1.....	88	38	54.5	1.00		Point George L. H.....	.....	.....	.....	0.73	
Hot Springs.....	106	59	82.6	0.68		Bodie t.....	82	17	52.2*	0.01		Point Hueneme L. H.....	.....	.....	.....	1.25	
Jerome.....	102	54	77.9	0.70		Bowmans Dam.....	.....	.....	.....	2.12		Lobos.....	82	48	57.3	0.25	

TABLE II.—*Meteorological record of voluntary and other cooperating observers—Continued.*

Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.	
	Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.
<i>California—Cont'd.</i>	°	°	°	Ins.	Ins.	<i>Colorado—Cont'd.</i>	°	°	°	Ins.	T.	<i>Georgia—Cont'd.</i>	°	°	°	Ins.	Ins.
Santa Barbara a	90	48	64.0	0.00		Smoky Hill Mine	88	27	55.7	3.51		Canton†	°	°	°	1.47	
Santa Barbara L. H.				0.00		Springfield			2.02			Cedartown	96	58	77.4	2.72	
Santa Clara a				0.08		Stamford†	80	30	47.4	2.61	9.5	Clayton†	96	54	74.6	2.59	
Santa Cruz b†	100	40	63.2	0.06		Strickler Tunnel			2.84			Columbus	98	62	82.1	2.24	
Santa Cruz L. H.				1.00		T. S. Ranch†	93	35	67.0	0.15		Covington	102	62	80.2	1.46	
Santa Maria	97	48	68.0	0.00		Villas			1.81			Crescent	95	60	78.8	3.41	
Santa Monica*†	80	55	61.6	0.00		Wagon Wheel	81	18	49.0	1.00		Dahlonega†	93	56	74.2	3.87	
Santa Rosa*†	94	49	65.3	0.17		Walden	87	17	54.2	1.03		Diamond	96	52	73.2	3.04	
Saticoy				0.00		Wallet			3.26			Eastman	99	64	80.4	1.43	
Shasta				0.12		Wray†	100	40	69.6	2.98		Elberton†	98	64	80.4	2.37	
Sierra Madre	92	49	67.8	0.00		Yuma			2.70			Fleming†	100	64	82.0	6.94	
Sonoma*†				0.27		<i>Connecticut.</i>						Fort Gaines	96	64	82.0	4.09	
S. E. Farallone L. H.				0.00		Canton†	90	41	66.2	2.71		Franklin†	96	62	79.0	2.57	
Stockton a	98	46	69.4	0.03		Colchester	88	41	66.1	0.79		Gainesville	94	62	76.8	1.23	
Summerdale†	85	36	61.2	0.00		Falls Village			2.99			Gillsville†	100	62	79.5	2.64	
Susanville†	87	35	61.3	1.02		Greenfield Hill			0.55			Greenbush	96	55	76.2	5.75	
Sutter Creek*†	93	40	66.4	0.00		Hartford a	92	44	68.3	1.81		Griffin	99	61	79.1	2.99	
Tehama*†	101	58	78.5	0.11		Hartford b			1.59			Hephzibah ²	.....	60	84.2	1.40	
Templeton*†	105	50	69.5	0.00		Hawleyville	91	41	67.6	0.57		Jesup	98	61	78.8	5.68	
Trinidad L. H.				1.11		Lake Konomoe			1.70			Lagrange†	98	65	81.3	3.73	
Truckee ¹	90	35	59.0	0.00		Middletown	93	43	69.0	0.39		Levett	104	57	81.0	3.05	
Tulare c	110	48	78.1	0.00		New London†	86	47	63.1	1.09		Louisville	100	62	81.8	1.77	
Turlock	99	60	78.4	0.00		North Franklin			1.89			Lumpkin	98	67	81.2	3.75	
Ukiah	95	42	65.7	0.65		North Grosvenor Dale			2.31			Macon	102	60	81.6	2.63	
Upperlake	98	44	67.7	0.58		Norwalk	91	44	67.5	0.79		Marietta	94	60	76.8	1.94	
Upper Mattole*†	85	46	60.6	3.32		Pomfret	84	40	67.2	2.40		Marshallville†	98	68	81.8	3.76	
Vacaville a*†	101	56	72.6	0.00		Southington	90	42	67.0	0.53		Mauzy	98	60	80.9	6.64	
Ventura†	100	39	60.8	0.00		South Manchester			1.48			Millen	100	63	82.0	3.73	
Visalia	107	41	73.4	0.00		Storrs	87	44	65.2	2.48		Morgan†	98	59	79.0	5.97	
Volcano Springs*†	123	79	69.2	0.00		Voluntown†	87 ¹	39	65.4 ²	3.44		Mount Vernon	101	69	84.4	6.80	
Walnut Creek	104	49	72.7	0.33		Waterbury	93	40	67.8	0.64		Newnan	100	65	80.0	2.93	
Wheatland	107	47	73.6	0.17		West Cornwall†	86	45	65.8	2.87		Point Peter	101	57	80.2	1.82	
Williams*†	101	54	76.5	0.00		West Simsbury			2.23			Poulton†	102	57	81.4	2.39	
Wilmington ⁶	100	45	65.8	0.00		Winsted*†	90	55	66.6	.....		Quitman†	99	58	81.8	3.46	
Wire Bridge ⁶	97	52	73.1	0.88		<i>Delaware.</i>						Ramsey	99	50	77.4	3.95	
Yerba Buena L. II.				0.00		Dover	94	51	71.0	2.07		Rome†	99	55	78.2	3.00	
Yreka†	94	32	63.4	0.10		Milford	95	54	73.2	2.40		Talbotton†	96	63	80.2	1.59	
Yuba City*†	102	63	80.6	0.00		Millsboro	97	52	70.8	3.64		Tallapoosa	95	62	77.9	4.32	
<i>Colorado.</i>						Newark	94	49	70.8	3.39		Thomasville†	98	64	82.4	3.57	
Altmans	83	28	51.0	.....		Seaford	95	52	71.5	3.12		Toocoo†	96	54	77.8	0.89	
Antlers†	99	35	68.0	0.82		<i>District of Columbia.</i>						Union Point	96	51	77.9	1.82	
Arkins				1.86		Distributing Reservoir*†	92	59	76.0	.....		Washington†	98	65	81.4	2.51	
Boulder	95	42	66.6	1.51		Receiving Reservoir*†	93	58	75.0	.....		Waycross	99	61	81.4	2.50	
Boxelder				1.66		West Washington	97	51	73.8	1.62		Wayneshore	97	60	79.6	3.92	
Breckenridge†	84	17	48.8	1.14		<i>Florida.</i>						West Point	99	63	81.8	6.00	
Canyon†	102	43	69.0	1.07		Archer†	100	59	78.6	2.88		<i>Idaho.</i>					
Castlerock	89	35	63.3	1.82		Bartow	99	60	82.8	4.27		Albany Falls	86	35	59.6	1.72	
Cedaredge	94	27	63.4	0.33		Boca Raton†	89	66	79.8	0.28		American Falls	100 ¹	34	65.0	0.28	
Cherryenne Wells	97	39	67.8	3.95		Brooksville†	97	64	81.0	4.74		Blackfoot†	96	32	64.4	0.55	
Colbran				0.37		Carrabelle†	94	70	82.0	T.		Boise Barracks	105	34	66.3	0.10	
Colorado Springs†	92	40	62.1	3.61		De Funiki Springs	98	64	79.6	3.67		Burnside†	86	32	58.6	1.79	
Crook	108	40	70.4	0.87		Earnestville	100	63	82.6	9.07		Coeur d' Alene	92	39	62.1	.....
Delta	105	34	70.5	0.40		Esterio*†	93	68	81.0	.....		Corral†	91	39	59.0	0.52	
Dumont†				2.60		Eustis†	101	63	82.0	5.04		Downey	94	36	58.9	1.28	
Durango	92	30	62.9	0.62		Federal Point†	95	61	79.5	3.04		Fort Sherman†	93	34	61.2	0.48	
Fleming				1.27		Fort Meade			8.64			Gimlet†	90	26	57.8	1.47	T. 0.5
Fort Collins†	97	36	64.0	1.37		Gainesville	100	64	82.6	3.28		Gray	86	25	55.0	1.75	
Fort Morgan	106	38	69.7	1.30		Grasmere†	101	61	83.2	2.62		Kootenait	89	31	62.0	1.91	T.
Fox				3.87		Haywood			3.11			Lakeview	86	30	51.3	1.21	
Garnett	89	20	57.2	0.65		Homeland	99	65	83.4	.....		Lewiston	94	41	66.3	0.87	
Georgetown	85	30	57.0	.....		Huntington	99	64	81.2	2.25		Lost River	95	30	59.8	1.26	
Gleneyrie†	88	37	61.3	1.65		Kissimmee	97	55	82.2	5.75		Marysville	93	23	59.6	0.15	
Grand Junction†	100	41	72.6	0.05		Lake Butler	98	60	81.8	3.90		Moscow	86	32	57.9	1.31	
Greeley	99	39	66.9	1.69		Lake City†	101	59	81.4	2.42		Murray†	93	34	57.8	2.02	
Gunnison*	96	32	61.8	.....		Lakemont	100	63	83.2	0.84		Nampa	102	34	66.1	0.29	
Hamps	93	35	62.6	1.03		Lemon City	91	65	81.0	0.70		New Plymouth	99	37	68.4	0.63	
Hoechne	97	40	67.9	1.66		Maccleeny†			5.57			Oakley	100	31	65.4	0.58	
Holly				3.00		Manatee	100	60	80.7	5.35		Paris	93	26	58.0	0.82	
Holyoke				1.92		Merritts Island	94	66	81.2	0.64		Payette	103	38	70.9	0.54	
Holyoke (near)	105	35	69.8	1.13		New Smyrna	94	58	77.4	2.55		Pollock†	100	36	62.3	1.08	
Hugo				1.10		Ocala†	100	60	81.4	3.50		St. Maries	90	35	61.4	0.83	
Husted†	94	35	62.2	2.71		Orange City	98	66	83.6	5.18		Salubria	101	33	64.6	0.36	
Lake Moraine†	77	27	50.0	3.68		Orange Park	98	59	81.4	1.35		Soldier†	96	27	58.0	0.88	
Lamar†	102	42	72.3	3.67		Orlando†	97	63	81.7	1.13		Swan Valley†	89	27	58.1	0.82	
Laporte				1.27		Plant City	99	68	81.2	3.09		Warren†	90	24	55.0	1.15	
Las Animas†	101	48	70.9	2.45		St. Andrews	97	54	77.6	3.57		Weston s.	84	34	59.4	1.07	
Leadville (near)*†	78	32	58.1	0.36		St. Francis†	97	54	77.6	1.10		Yellow Jacket	.....	2.10			
Leroy†	104	38	67.6	1.31		St. Francis Barracks</td											

TABLE II.—*Meteorological record of voluntary and other cooperating observers*—Continued.

TABLE II.—*Meteorological record of voluntary and other cooperating observers—Continued.*

Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.	
	Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.
Kansas—Cont'd.																	
Hays	98	49	72.6	1.97	Ins.	Louisiana—Cont'd.	90	68	80.0	9.05	Ins.	Massachusetts—Cont'd.	90	91	38	64.9	2.86
Horton	94	59	74.7	4.24		Farmerville	92	68	82.5	9.85		Concord	91	38	48	66.6	4.15
Hoxie						Franklin ^t	97	68	79.4	12.04		Dudley ^t	87*	88	48	65.3	3.74
Hutchinson	94	58	74.8	5.93		Grand Coteau	95	68	81.0	7.63		East Templeton ^{*t}	88	48	48	66.1	0.88
Independence	101	62	78.8	4.60		Houma ^a	95	66	75.3	12.35		Fall River	88	48	48	66.1	0.88
Lawrence	93	60	75.8	3.50		Jeanerette	96	61	77.6	5.84		Fiske Dale	88	48	52	65.8	2.70
Lebanon						Jennings	96	61	79.6	13.01		Fitchburg ^{a*t}	88	48	52	65.8	3.58
Lebo ^t	93	61	75.6	8.15		Lafayette	95	63	79.6	13.01		Fitchburg ^b	89	40	48	65.9	3.06
Linn						Lake Charles ^t	95	66	80.4	3.85		Framingham	92	41	48	66.8	2.24
Macksville	95	58	72.2	3.61		Lawrence	93	64	81.2	4.46		Groton	89	38	48	64.7	3.10
McPherson	95	56	74.9	5.90		Liberty Hill	98	64	79.5	4.64		Hyannis ^{a*t}	84	45	61.3	1.22	
Manhattan ^b	95	59	76.0	4.99		Mansfield	95	65	79.3	9.87		Jefferson	88	48	48	66.3	3.38
Manhattan ^c	94	57	75.4	4.88		Melville						Lawrence	91	45	66.3	2.68	
Marion ^t	95	60	78.8	4.10		Minden	97	63	80.3	6.81		Leeds	92	40	48	66.7	4.77
Meade ^t	106	53	75.6	3.14		Montgomery	98	65	81.3	5.46		Leicester Hill	88	44	48	66.4	2.63
Medicine Lodge ^t	99	56	77.4	7.97		New Iberia	92	68	79.8	13.10		Leominster					
Minneapolis ^t	102	51	76.6	1.92		Oakridge	97	65	80.9	13.05		Long Plain					
Morantown ^t	90	61	74.8	9.06		Opelousas	96	60	79.0	6.16		Lowell ^a	89	43	66.7	3.68	
Mount hope ^{*t}	95	65	76.1	4.77		Oxford ^b	94	64	79.5	4.64		Lowell ^b	91	41	65.3	3.12	
Ness City	99	55	76.0	2.93		Paincourtville ^t	95	68	80.1	7.23		Ludlow	88	40	62.0	6.00	
Newton	94	59	75.2	5.75		Plain Dealing ^t	95	64	79.2	14.56		Lynn ^a	90	45	65.0	1.53	
Norwich						Plaquemine	100	65	81.6	8.28		Mansfield ^{*t}	88	48	63.7	1.76	
Oberlin						Rayne	97	65	80.1	11.90		Middleboro	87*	39	61.8	1.74	
Olathe ^t	95	61	75.8	4.81		Robeline	95	61	78.2	4.98		Monson	90	38	38	66.7	3.33
Osage City ^t	98	62	76.0	3.19		Ruston	89	67	77.6	13.26		New Bedford ^a	86	45	63.6	0.94	
Oswego	96	60	78.5	6.53		Schriever	98	64	80.4	9.54		New Bedford ^b	87	48	63.9	1.40	
Ottawa	93	57	74.4	5.62		Shell Beach	92	70	81.4	6.73		New Salem	84	48	64.2	3.98	
Phillipsburg	102	50	72.7	3.57		Southern University ^t	92	68	78.6	4.72		Pittsfield	87	53	65.8	7.86	
Pratt	101	60	78.9	4.30		Sugar Ex. Station ^t	93	69	81.4	4.47		Plymouth ^{*t}	90	52	65.6	1.70	
Rome ^{*t}	96	58	74.8	2.78		Sugartown	91	64	79.5	6.65		Princeton					3.02
Russell	100	49	76.4	3.84		Venice ^t	90	68	80.1	5.24		Somerset ^{*t}	96	46	68.5	1.04	
Salina ^t	101	58	76.8	2.92		Wallace	92	68	80.5	4.14		Springfield Armory	91	38	65.8	3.26	
Sedan ^t	96	62	77.8	5.49		White Sulphur Springs	93	65	79.8	9.40		Sterling					3.11
Toronto	92	58	75.6	4.71								Taunton ^c	87	37	64.6	1.55	
Ulysses												Turners Falls	90	41	66.6	2.73	
Viroqua ^t	101	47	73.2	3.46								Webster					3.07
Wallace [*]												Westboro ^t	90	38	67.2	3.15	
Wamego ^{*t}	94	64	76.3	6.92								Weston	88	44	65.0	1.78	
Kentucky.												Williamstown	86	44	65.1	3.01	
Alpha ^{*3}												Winchendon					4.44
Ashland												Michigan.					
Bardstown ^t	95	49	74.8	3.10								Adrian	91	44	68.5	5.24	
Blandville ^t	96	53	75.7	5.91								Agricultural College	92	43	67.6	4.91	
Bowling Green ^t	94	61	77.3	7.79								Allegan	96	43	69.2	3.12	
Burnside ^t												Alma	94	43	68.7	2.84	
Caddo	95	54	75.8	2.15								Ann Arbor	93	44	69.2	2.82	
Canton ^{*1}	96	64	77.2	5.23								Arbela	93	41	68.4	5.16	
Carrollton	96	58	78.4	2.00								Badaxe	92	43	66.5	3.28	
Cynthiamburg												Baldwin	92	31	66.2	1.27	
Earlington	96	62	77.6	3.35								Ball Mountain	92	43	67.2	1.99	
Edmonton ^t	90	55	74.2	5.45								Baraga	90	35	57.5	5.17	
Ensor	92	57	77.4	2.84								Battle Creek	93	44	70.4	4.12	
Eubank	95	50	73.0	5.65								Bay City ^b	92	44	66.5	4.53	
Falmouth ^t												Berlin	91	39	66.7	2.89	
Fords Ferry	94	54	77.1	2.98								Berrien Springs	95	38	68.8	3.22	
Frankfort												Big Point Sable ^{*10}	77	46	59.8	2.00	
Georgetown	94	54	75.2	.....								Big Rapids	88	38	66.4	1.98	
Greensburg ^t	95	50	75.7	1.75								Birmingham	95	45	71.1	2.16	
Henderson ^t	96	61	79.0	2.04								Bois Blanc ^{*10}	96	43	58.8	2.00	
Hopkinsville ^t	96	59	78.6	4.91								Boon	89	36	64.0	2.61	
Irvington	96	53	75.4	3.11								Calumet	87	40	57.4	6.43	
Leitchfield ^t	91	54	75.0	4.84								Camden	94	42	69.8	3.63	
Loretto	95	49	74.5	5.01								Carsonville	92	38	65.6	3.04	
Lyndon												Charlevoix	92	44	62.4	7.26	
Maysville	98	45	75.2	3.72								Clinton	93	39	61.2	4.36	
Middlesboro ^t	98	51	74.2	2.96								Coldwater	91	43	68.4	3.44	
Mount Hermon	93	55	75.3	4.75								Crisps ^{*10}	90	39	57.9	2.00	
Mount Sterling ^t	97	52	74.8	4.56								East Tawas	91	45	65.0	3.66	
Owensboro ^t	93	56	77.0	2.21								Eloise	93	48	68.8	3.23	
Owenton ^t	92	57	74.8 ^r	3.35								Escanaba ^t	86	38	61.7	3.82	
Paducah ^a												Ewen	90	30	60.8	2.00	
Paducah ^b	97	62	80.8	4.81								Fairview	90	44	67.0	1.98	
Princeton	96	57	78.2	3.73								Fitchburg	94	39	67.7	3.57	
Richmond ^t	98	52	75.3	3.35								Flint	94	41	67.2	2.56	
Russellville ^t	98	55	78.8	4.09								Gladwin	94	38	66.3	2.04	
St. John ^t	92	53	73.7	5.05								Grand Rapids ^b	93	40	69.6	2.04	
Scott	91	48	73.9	3.50								Grape	93	44	69.8	1.80	
Shelby City	100	48	74.7	1.91								Grayling	95	36	66.0	3.10	
Shelbyville ^t	101	49	77.0	5.80								Hammonds Bay ^{*10}	92	48	60.2	2.00	
Vanceburg	94	45	72.2	4.80								Hanover	91	38	67.8	2.84	
Williamsburg ^t	97	54	77.2	1.55								Harrisville	95	41	62.7	6.59	
Woodburn [*]												Hart	89	37	67.2	0.80	
Louisiana.					</												

TABLE II.—*Meteorological record of voluntary and other cooperating observers—Continued.*

Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		
	Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.	
Michigan—Cont'd.						Minnesota—Cont'd.						Missouri—Cont'd.						
Lansing.....	93	43	68.5	4.48	Ins.	Mapleplain.....	90	54	69.6	2.96	Ins.	Brunswick.....	91	60	74.8	9.88	Ins.	
Lapeer.....	92	40	67.2	3.36		Maplewood *1.....	90	41	64.8	1.97		Carrollton.....	93	62	76.0	4.68		
Lathrop.....	90	30	60.0	6.02		Milaca.....	94	41	66.5	3.12		Conception.....	90	60	73.3	6.59		
Ludington.....	93	40	63.4	1.18		Milan.....	95	43	68.2	4.32		Cowgirl *6.....	88	60	74.8	7.79		
Luverne.....	93	36	64.8	5.68		Minneapolis a.....	93	46	68.2	2.85		Darksville.....	92	56	74.4	8.30		
Mackinaw City.....	92	40	58.4	5.42		Minneapolis b ¹	93*	43	67.0	2.72		Dowling.....	.....	.....	.....	2.42	
Madison.....	95	45	70.5	3.19		Minneapolis City t.....	.....	.....	.....	.....		East Lynne *3.....	58	72.0	6.26		
Mancelona.....	93	35	65.6	5.26		Morris.....	94	44	67.2	3.01		Edgewise *5.....	90	50	74.8	4.71		
Manistee.....	89	36	62.7	2.93		Mount Iron.....	92	33	60.8	8.28		Eightmile *1.....	88	58	72.0	5.83		
Manistique.....	80	40	58.1	4.82		Newfoden.....	89	34	61.2	5.27		Eldon.....	.....	58	.....	4.08	
Middle Island *10.....	86	49	60.4	.....		New London.....	96	46	69.0	2.48		Elmira.....	95	53	73.6	6.66	
Midland.....	94	49	68.0	2.90		New Richland *1.....	94	52	67.8	.....		Fairport.....	.....	.....	.....	10.71	
Mottville.....	94	42	69.4	2.53		New Ulm t.....	93	46	68.4	3.74		Farmersville.....	.....	.....	.....	8.64	
Mount Clemens.....	95	42	68.1	3.86		Park Rapids t.....	92	41	63.1	4.17		Fayette.....	97	60	78.7	8.86		
Mount Pleasant b.....	92	42	67.2	4.04		Pine River.....	90	43	63.8	11.39		Fulton.....	.....	.....	.....	7.21	
Muskallongee Lake *10.....	93	41	55.5	.....		Pipestone.....	.....	.....	.....	.....		Gallatin *1.....	92	58	74.7	10.10	
Muskegon.....	86	43	65.6	1.98		Pleasant Mounds.....	88	46	66.6	4.51		Glasgow.....	94	58	75.8	5.28		
Newberry.....	86	30	58.0	3.63		Pokegama Falls.....	90	33	61.7	5.57		Gordonville *3.....	66	73.1	5.79			
North Manitou Island *10.....	81	45	62.4	.....		Redwing.....	.....	.....	.....	.....		Gorin.....	.....	.....	.....	3.74	
North Marshall.....	92	38	67.0	4.76		Reeds.....	.....	.....	.....	.....		Halfway.....	90	56	74.8	6.16	
Northport.....	90 ^b	42 ^b	62.7	3.85		Rolling Green.....	90	48	67.4	2.60		Harrisonville t.....	94	58	75.2	7.49		
Old Mission.....	92	42	64.0	3.71		St. Charles t.....	94	44	68.0	3.40		Hermann t.....	.....	.....	.....	5.85	
Olivet.....	89	44	69.0	4.00		St. Cloud.....	93	45	66.4	3.73		Houston.....	94	58	75.4	8.10		
Omer.....	94	35	63.4 ^c	1.65		St. Olaf.....	92	44	65.6	1.94		Irenia.....	.....	.....	.....	5.84	
Ottawa Point *10.....	88	49	63.6	.....		St. Peter.....	.....	.....	.....	.....		Ironton t.....	94	49	75.0	6.18	
Ovid.....	94	40	68.2	3.76		Sandy Lake Dam.....	89	34	61.8	4.72		Jefferson City t.....	100	57	76.9	5.63		
Owosso.....	94	42	70.1	3.87		Sauk Center.....	92	44	72.6	2.65		Kidder.....	93	58	73.5	10.58		
Parkville.....	94	42	68.2	3.14		Shakopee.....	92	47	70.2	2.68		Lamar t.....	96	60	77.2	7.55		
Pentwater *10.....	86	50	64.4	.....		Tower t.....	97	.....	7.50	.....		Lamonte.....	.....	.....	.....	4.93	
Petroskey.....	93 ^a	39 ^a	60.2 ^a	6.12		Two Harbors.....	84	36	55.0	6.45		Lebanon.....	89	61	74.6	7.81		
Plymouth.....	95	39	67.3	2.16		Wabasha *1.....	97	53	69.1	3.08		Lexington.....	93	55	76.0	4.56		
Pointe aux Barques *10.....	88	49	65.0	.....		Willmar.....	91	43	66.7	2.70		Liberty.....	92	56	75.2	4.70	
Point Betsey *10.....	74	50	60.9	.....		Willow River.....	92	33	63.6	4.70		Louisiana.....	93	58	75.0	7.15	
Port Austin.....	92	41	64.8	7.53		Winnebago City.....	97	46	68.1	6.42		McNamee *1.....	90	62	74.8	6.50		
Powers.....	92	33	63.8	.....		Zumbrota ^b	91*	42	69.1	.....		Malden.....	98	61	79.6	5.77	
Reed City.....	91	35	65.4	.....		Mississippi.						Mansfield.....	.....	.....	.....	4.30	
Rockland ¹	87	42*	59.9	0.29		Aberdeen.....	102	64	81.3	3.20		Marblehill.....	92	54	74.8	4.87		
Rogers.....	96	41	60.0	4.59		Agricultural College.....	95	61	77.8	2.46		Marshall t.....	92	57	75.0	5.34		
Romeo.....	92	45	93.3	4.48		Austin t.....	94	65	80.1	2.38		Maryville.....	95	56	74.0	4.80		
Saginaw.....	94	42	69.3	4.59		Batesville t.....	95	63	79.2	3.88		Mexico t.....	95	55	75.8	6.52		
St. Ignace.....	86	42	59.6	4.36		Bay St. Louis.....	90	70	81.0	4.44		Mineralspring.....	89	57	73.2	5.40		
St. Johns.....	91	43	69.4	3.17		Biloxi t.....	91	70	80.4	4.89		Montreal.....	90	55	74.4	6.56		
St. Joseph.....	91	48	69.4	2.69		Booneville.....	95	64	80.3	1.19		Mount Vernon.....	94	60	76.0	5.12		
Sandbeach a.....	92	40	63.4	4.19		Briers.....	90	68	78.4	7.08		Neosho.....	91	59	75.8	4.73		
Sidnaw.....	90	30	60.7	.....		Brookhaven t.....	100	62	81.2	4.26		Nevada.....	90	56	74.6	6.68	
Somerset.....	91	42 ^b	67.8 ^b	1.12			96	64	79.6	5.56		New Haven.....	92	58	76.3	4.32		
South Haven.....	90	41 ^b	68.1 ^b	2.25		Canton t.....	96	61	81.2	5.56		New Madrid.....	97	62	79.3	6.23		
Stanton.....	92	36	68.5	.....		Columbus a.....	.....	.....	.....	.....		New Palestine.....	95	64	75.6	7.57	
Strurgeon Point *10.....	90	40	62.1	.....		Columbus b.....	102	67	83.4	3.12		Oakfield.....	94	59	77.5	6.20	
Thomaston.....	90	30	61.2	2.56			Corinth.....	95	60	79.7	2.42		Oakmound.....	3.04	
Thornville.....	91	46	69.8	3.30			Crystal Springs t.....	96	66	81.3	6.02		Olden t.....	89	58	73.8	4.11	
Thunder Bay Island *10.....	81	42	60.4			Edwards.....	97	68	81.9	9.06		Oregon a.....	93	60	74.5	4.61	
Traverse City.....	93	42	62.7	3.42			Fayette.....	95	62	79.5	10.75		Oregon b.....	94	59	76.1	4.10	
Two Heart River *10.....	94	40	56.3			French Camps.....	95	62	77.0	3.38		Osceola t.....	9.35	
Valley Center.....	92	35	64.8	1.85			Greenville a.....	92	69	79.6	2.40		Palmyra *5.....	92	60	79.6	3.85	
Vandalia.....	91	45	69.4	2.64			Greenville b t.....	93	68	80.6	2.54		Phillipsburg *1.....	92	66	74.5	7.94	
Vassar.....	93	41	67.1	3.42			Greenwood.....	93	62	79.3	6.61		Pickering *4.....	92	54	71.0	3.74	
Vermillion Point *10.....	84	35	51.4			Hattiesburg t.....	98	68	82.5	4.80		Platte River.....	92	57	74.4	6.81	
Wasepi.....	91	44	68.7	3.19			Hazlehurst.....	97	66	80.5	8.74		Potosi.....	94	59	76.8	4.28	
Waverly.....	91	38	67.2	3.00			Hernando.....	94	66	80.2	2.63		Princeton.....	99	59	76.8	4.28	
West Harrisville.....	90	40	62.4	7.29			Holly Springs t.....	96	67	81.1	3.11		Rhinelander.....	93	52	75.2	4.85	
Wetmore.....	87	39	56.5	5.23			Jackson t.....	97	61	81.2	5.72		Richmond.....	92	58	74.2	6.41	
White Cloud.....	91	37	68.1	1.42			Lake t.....	95	64	79.4	6.09		Rolla.....	3.02	
Williamston.....	93	42	68.4	2.84			Leakesville.....	100	60	80.5		St. Charles.....	92	57	76.1	8.59	
Ypsilanti.....	90	45	67.8	3.67			Logtown t.....	95	68	81.5	2.69		St. Joseph.....	8.61	
Minnesota.													Sarexie *3.....	94	62	75.2	5.14	
Adat.....	98 ^b	37 ^b	65.4 ^b	4.48 ^b									Sedalia.....	93	60	76.1	9.14	
Albert Lea.....	89	46	66.8	4.0									Seymour.....	88	58	73.3	3.39	
Alexandria t.....	93	45	66.1	4.51									Shelbina.....	5.10	
Beardsley.....	99	39	66.0	3.24									Sikeston.....	95 ^a	53	76.2 ^a	3.45	
Bingham Lake.....	93	41	68.4	2.45									Steffenville.....	92	56	74.2	3.29	
Bird Island.....	93	43	66.9	2.12									Stelladat t.....	91	58	76.2	7.24	
Blooming Prairie t.....	92	43	67.5	3.60									Sublett.....	93	52	73.8	3.15	
Caledonia t.....	89	46	67.8	3.92									Unionville.....	96	57	77.4	6.02	
Camden.....	95	42	68.2	3.71			</td											

TABLE II.—*Meteorological record of voluntary and other cooperating observers*—Continued.

Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.	
	Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.
<i>Montana—Cont'd.</i>	o	o	o	Ins.	Ins.	<i>Nebraska—Cont'd.</i>	o	o	o	Ins.	Ins.	<i>Nevada—Cont'd.</i>	o	o	o	Ins.	Ins.
Glenive †	103	45	66.2	5.70		McCook	o	o	o	Ins.	3.70	Sodaville	100	41	70.7	0.00	
Glenwood	92	34	57.3	3.17		McCool	.....	.....	.....	.....	5.23	Tecoma	.....	.....	.....	2.00	
Greatfalls	89	39	60.8	2.93		Madison	92	44	70.9	.....	6.06	Toano *†	92	38	65.0	2.38	T.
Kipp†	88	39	55.5	1.50	T.	Madrid *†	105	45	69.4	1.78	6.46	Tuscarora	85	18	50.5	0.57	
Lewistown	90	32	57.0	5.11		Marquette	.....	.....	.....	.....	6.40	Tybo	98	34	66.6	T.	
Livingston†	94	36	58.1	4.28		Merriman	.....	.....	.....	.....	6.44	Verdi *†	95	32	64.8	0.35	
Manhattan†	89	33	57.9	3.05		Minden a	96	48	70.6	4.44	6.11	Wadsworth *†	94	40	69.0	0.00	
Martinsdale†	88	33	56.2	4.03	T.	Minden b	.....	.....	.....	.....	4.39	Wells	93	21	66.6	0.26	
Marysville†	83	35	54.6	4.22		Monroe	.....	.....	.....	.....	4.39	<i>New Hampshire.</i>	.....	.....	.....	.....
Parrot	93	36	60.0	4.25		Nebraska City b	99	51	73.9	2.77	2.31	Alstead *†	82	44	67.6	3.05	
Poplar	99	42	64.0	2.78		Nebraska City c	100	62	67.4	5.18	3.24	Berlin Mills	87	34	61.0	5.30	
Redlodge	95	33	55.2	4.17		Nemaha *†	96	46	67.8	4.23	8.12	Bethlehem	84	39	63.0	5.10	
St. Ignatius Mission	80	37	59.6	1.13		Nesbit	94	48	70.2	6.04	4.17	Brookline *†	90	50	66.5	4.40	
St. Pauls†	90	32	58.8	2.70		North Loup	96	48	68.7	4.43	3.25	Claremont d	89	36	67.0	1.66	
Troy	91	34	59.6	1.56		Oakdale†	96	47	70.5	4.82	3.25	Concord	89	35	65.6	3.10	
Utica	90	34	56.4	5.80		Odell *†	93	62	73.8	4.03	3.25	Durham	90	38	64.2	2.44	
Wibaux	84	37	62.7	6.79		O'Neill†	93	44	66.9	2.82	3.25	Hanover	90	38	66.0	4.30	
Yale	87	34	56.9	3.61		Ord	96	44	69.7	2.31	3.25	Keene	90	35	65.2	3.41	
<i>Nebraska.</i>	.....	.....	.....	.....	.....	Osceola	.....	.....	.....	.....	5.06	Lancaster	.....	.....	.....	3.89	
Agee *†	96	53	69.5	2.51		Ough†	.....	.....	.....	.....	3.24	Littleton	83	40	63.4	5.36	
Albion	92	48	69.7	4.62		Palmer b	.....	.....	.....	.....	8.12	Nashua	92	44	66.2	3.25	
Alliance	.....	.....	.....	1.10		Plattsmouth a	.....	.....	.....	.....	4.17	Newton	90	35	63.7	3.46	
Alma *†	98	56	72.2	4.49		Ravenna a	94	46	70.0	3.25	3.25	North Conway	89	32	64.4	3.60	
Austley†	96	41	68.8	3.49		Redelund a	94	58	72.4	1.30	3.05	Peterboro	87	33	63.9	3.69	
Arapaho *†	97	50	71.0	3.23		Redelund b *†	94	54	74.6	4.00	3.05	Plymouth	90	35	64.9	2.92	
Arborville *†	95	54	71.3	6.44		Rulon *†	99	64	76.4	5.14	3.05	Sanbornton†	86	36	63.1	4.08	
Ashland a†	98	51	73.8	2.21		St. Libery	96	50	71.6	5.36	3.05	Stratford	87	34	62.8	3.97	
Ashland b *†	105	63	77.2	1.96		St. Paul	94	52	72.4	7.16	3.05	Warner	.....	.....	.....	3.99	
Ashton	96	50	70.3	4.45		Salem *†	94	60	74.5	5.05	3.05	<i>New Jersey.</i>	.....	.....	.....	.....
Auburn *†	96	56	73.9	4.94		Santee Agency†	98	46	71.9	2.41	3.05	Asbury Park	96	50	69.0	1.73	
Aurora	.....	.....	.....	8.45		Schuyler	.....	.....	.....	.....	3.05	Bayonne	95	51	71.2	1.88	
Beatrice†	97	57	74.0	1.64		Seneca *†	100	44	69.2	0.20	3.05	Belvidere	93	43	70.4	2.29	
Beaver City†	102	49	71.4	3.73		Seward *†	94	59	73.2	4.97	3.05	Bergen Point	92	51	70.6	1.86	
Bellevue	.....	.....	.....	4.49		Springview	.....	.....	.....	.....	3.05	Beverly†	96	47	72.8	1.66	
Benedict	.....	.....	.....	4.91		Stanton	.....	.....	.....	.....	3.05	Billingsport *†	93	60	71.8	3.54	
Henkelman	.....	.....	.....	3.26		Stockham	.....	.....	.....	.....	3.05	Boonton	94	48	70.8	2.13	
Blair	95	51	71.2	3.58		Strang *†	94	60	74.4	9.37	3.05	Bridgeton	96	50	73.8	3.24	
Bluehill	.....	.....	.....	3.75		Stratton	.....	.....	.....	.....	3.05	Camden	92	51	71.0	1.56	
Brokenbow	.....	.....	.....	2.49		Superior *†	98	60	75.6	3.79	3.05	Cape May C. H.†	92	47	68.3	2.30	
Burchard	.....	.....	.....	3.95		Tedford *†	96	42	66.6	6.10	3.05	Charlotteburg	94	38	66.0	2.12	
Burwell	.....	.....	.....	2.68		Turlington†	94	50	70.6	2.79	3.05	Chester	92	43	68.2	2.09	
Callaway†	96	40	69.1	2.98		Valentine†	98	40	67.8	2.11	3.05	Clayton	95	48	71.0	1.74	
Camp Clarke	102	33	69.0	1.68		Valparaiso	95	48	70.6	5.04	3.05	College Farm†	94	47	70.9	1.13	
Central City *†	96	52	75.0	5.15		Wakefield	95	48	70.3	6.78	3.05	Deckertown	92	41	68.6	2.52	
Cody	.....	.....	.....	0.60		Wallace	.....	.....	.....	.....	3.05	Dover	94	42	69.5	1.29	
Columbus†	94	49	70.9	5.09		Wauneta	.....	.....	.....	.....	3.05	Egg Harbor City	96	45	69.4	2.58	
Cornlea	.....	.....	.....	5.07		Weeping Water *†	95	54	71.1	3.67	3.05	Elizabeth†	97	48	71.6	1.96	
Creighton†	99	44	70.4	5.11		Westpoint†	95	48	73.0	6.24	3.05	Englewood	95	44	69.1	1.35	
Crete	94	51	73.0	3.92		Wilber *†	92	60	76.4	5.27	3.05	Flemington	94	45	71.2	1.85	
Culbertson	.....	.....	.....	3.48		Willard	.....	.....	.....	.....	3.05	Franklin Furnace	90	42	67.5	2.80	
Curtis a	99	45	70.2	3.27		Wilsonville *	97	54	74.6	4.05	3.05	Freehold	92	46	68.8	1.29	
David City	93	52	70.8	5.30		Wisner	.....	.....	.....	.....	3.05	Friesburg	96	47	70.8	1.80	
Dawson	92	55	75.8	4.99		Wymore *†	98	60	72.0	2.51	3.05	Gillette	93	45	69.0	1.65	
Divide	.....	.....	.....	3.81		York *†	98	58	72.0	4.76	3.05	Hammonton	.....	.....	.....	1.77	
Dunning	.....	.....	.....	1.07		<i>Nevada.</i>	.....	.....	.....	.....	3.05	Hanover	90	45	69.0	3.39	
Eden	.....	.....	.....	5.90		Austin	86	31	64.6	0.05	3.05	Hightstown	95	49	71.6	1.60	
Edgar *†	94	46	67.4	4.65		Battle Mountain *†	89	40	64.1	0.00	3.05	Imlaystown	96	46	72.4	1.38	
Elba	.....	.....	.....	6.05		Beowawe *†	84	40	64.2	T.	3.05	Junction	.....	.....	.....	2.76	
Ericson *†	98	55	75.4	2.48		Blaine	85	26	57.2	T.	3.05	Lambertville	97	45	73.4	0.96	
Ewing†	.....	.....	.....	2.42		Candelaria	98	39	68.0	T.	3.05	Moorestown	94	48	71.2	1.86	
Fairbury†	97	52	73.2	3.07		Carlin *	96	34	59.4	0.00	3.05	Newark b†	95	52	71.2	2.12	
Fairfield	.....	.....	.....	3.59		Clover Valley	.....	.....	.....	.....	3.05	New Brunswick a	96	47	73.2	1.24	
Fairmont†	95	50	70.9	8.75		Cranes Ranch	.....	.....	.....	.....	3.05	Newton	92	46	69.4	2.13	
Fort Robinson	99	35	64.8	2.09		Elko *†	95	42	63.7	0.15	3.05	Oceanic	93	48	67.4	2.95	
Franklin	.....	.....	.....	3.59		Ely	95	24	61.4	0.15	3.05	Paterson	96	52	69.4	1.87	
Fremont†	97	50	72.1	6.72		Empire Ranch	100	36	72.6	0.02	3.05	Plainfield	94	44	69.8	2.27	
Geneva†	96	50	72.9	11.62		Fenelon *†	86	32	59.2	0.45	3.05	Rancocas	.....	.....	.....	2.08	
Genoa	94	49	71.0	3.91		Golconda *†	90	34	62.5	0.00	3.05	Rivervale	97	43	68.8	1.24	
Gering	.....	.....	.....	1.38		Halleck *†	99	35	64.6	T.	3.05	Roseland	91	43	68.4	3.36	
Gordon	.....	.....	.....	1.06		Hawthorne a†	91	47	71.8	0.00	3.05	Salem	95	51	72.0	1.84	
Gothenburg	102	44	71.6	4.02		Hawthorne b†	95	41	68.0	0.00	3.05	Somerville	95	45	71.2	2.14	
Grand Island b	93	49	70.3	4.73		Hot Springs	.....	.....	.....	.....	3.05	South Orange	91	51	70.2	2.43	
Greeley	.....	.....	.....	6.12		Humboldt *†	92	40	65.0	T.	3.05	Staffordville	.....	.....	.....	1.78	
Haigler	.....	.....	.....	4.18		Lewers Ranch	87	29	60.8	0.23	3.05	Toms River	96	43	68.4	2.56	
Hartington†	97	47	69.2	6.03		Los Vegas	98	52	71.6	0.20	3.05	Trenton	95	50	73.1	1.62	
Harvard	90	52	70.6	6.02		Lovelock	.....	.....	.....	.....	3.05	Tuckerton	94	46	69.6	1.83	
Hastings *†	94	57	70.9	3.00		McGill	96	21	60.9	0.00	3.05	Vineland	100	47	71.3	2.59	
Hayes Center	.....	.....	.....	3.85		Martins	87	32	61.4	0.00	3.05	Woodbine	93	45	68.1*	2.34	
Hay Springs	98	36	66.5	0.43		Midas	89	29	62.2	0.10	3.05	<i>New Mexico.</i>	.....	.....	.....	.....
Hebron†	98	52	73.0	6.11		Mill City *†	100	42	70.8	0.00	3.05	Albert	106	46	74.5	2.35	
Hickman	.....	.....	.....	2.51		Monitor Mill	91	20	60.3	0.11	3.05	Albuquerque†	104	48	78.8	1.00	
Holdrege b	.....	.....	.....	3.85		Palisade *†	98	45	68.0	0.00	3.05	Alma	95	39	69.3	0.85	
Hooper *†	94	57	72.0	6.31		Palmetto	94	26	62.0	0.20	3.05	Aztec†	96	34	68.2	1.19	
Imperial†	102	40	70.8	3.55		Panaca	104	35	69.9</td								

TABLE II.—*Meteorological record of voluntary and other cooperating observers—Continued.*

Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.	
	Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.
<i>New Mexico—Cont'd.</i>						<i>New York—Cont'd.</i>						<i>North Dakota—Cont'd.</i>					
Fort Wingate	100	37	67.3	1.78	In.8.	Poughkeepsie	96	42	68.8	1.53	In.8.	Glenullin	97	38	62.4	1.12	
Galisteo	95	43	67.6	1.36		Primrose	94	44	68.4	1.28		Goetz	96	31	62.7	4.22	
Gallinas Spring†	101	48	72.2	1.82		Ridgeway	88	44	66.6	3.02		Grafton†	88	36	61.0d	4.45	
Gila	102	45	74.8	1.39		Rome	90	40	67.2	3.76		Hamilton	88	34	57.8	6.16	
Laluz	96	47	75.6	3.13		Romulus	91	41	68.8	3.42		Jamestown†	95	42	63.8	1.94	
Las Cruces†	100	42	72.3	1.83		Rose	.....	.....	.....	1.26		Kelso	92	40	63.4	5.86
Las Vegas Hot Springs	98	42	64.4	3.10		St. Johnsburg	90	40	67.8	4.14		Langdon	88	38	58.6	5.86	
Lordsburg*1	100	62	79.1	0.33		Saranac Lake	85	36	63.4	4.06		Larinore†	86	35	59.9	3.62	
Lower Penasco	99	48	70.8	1.80		Saratoga Springs	90	42	68.0	3.08		Lisbon	98	37	64.7	0.93	
Olio	108	33	70.0	0.05		Setauket†	90	48	67.1	0.62		McKinney	95	29	61.0	3.18	
Puerto de Luna	101	51	74.4	2.04		Sherwood	.....	.....	.....	3.70		Medora†	105	39	66.6	2.80
Raton	95	38	65.7	.....		Skaneateles	.....	.....	.....	3.50		Melville	93	30	64.4	3.38
Lincoln†	100	43	75.0	1.55		South Canisteo	88	32	63.0	2.90		Milton†	88	28	57.9	3.70	
Roswell†	99	48	72.1	6.05		Southeast Reservoir	.....	.....	.....	1.39		Minnewaukon	87	30	61.2	4.39
San Marcial	100	49	73.8	1.42		South Kortright†	89	33	64.4	3.70		Minot	93	34	65.2	3.00	
White Oaks†	95	40	66.7	5.21		Straits Corners	91	36	66.5	3.66		Minto†	93 ^d	63.1 ^d	4.97	4.97	
Winsors Ranch	86	25	54.2	2.35		Tieondaga	88 ^c	45	66.4 ^c	3.08		Napoleon†	96	35	63.9	2.07	
<i>New York.</i>						Victor	92	37	68.0	2.41		New England City	92	40	61.3	1.20	
Adams	90	38	66.8	2.15		Wappingers Falls	93	48	70.8	2.47		Oakdale†	93	39	61.6	4.49	
Addison	.....	.....	.....	3.67		Warwick	.....	.....	.....	2.59		Pembina	91	35	61.0	5.51
Akron	.....	.....	.....	2.25		Watertown	94	41	68.4	1.66		Portal	96	39	59.8	3.40
Alden	85	39	64.8	2.34		Watkins	93 ^d	37 ^d	67.4 ^d	2.14		Power†	93	34	62.0	2.36	
Alfred	86	32	64.8	3.80		Waverly†	91	36	68.2	2.28		St. John†	89	35	60.1	3.61	
Angelica†	87	35	65.6	5.28		Wedgewood	93	38	67.6	2.72		Townert	92	30	61.6	6.35	
Appleton	91	42	66.6	3.35		Westfield	87	46	68.0	6.17		University	85 ^e	36 ^e	59.9 ^e	6.08	
Arcade	85	39	64.6	6.17		Westpoint†	93	50	69.4	1.85		Valley City†	90	38	63.2	3.29	
Atlanta	.....	.....	.....	4.29		Willetspoint	93	50	69.2	1.13		Wahpeton†	99	37	67.3	1.79
Auburn	91	42	68.6	3.72		<i>North Carolina.</i>						Washburn	100	27	69.4	2.78	
Avon	90	40	67.4	3.73		Abshers	96	46	72.5	2.25		White Earth†	100	33	62.1	4.00	
Bedford	91	42	67.1	1.43		Asheville†	.....	.....	.....	6.00		Whites Ranch	43	.....	.....	1.27
Big Sandy*10	83	46	66.0	.....		Beaufort†	88	59	75.1	5.57		Wildrice† ²	.....	.....	63.4	1.70
Bolivar	87	32	63.8	5.12		Biltmore†	92	48	72.2	4.34		Willow City†	91	28	61.4	3.68	
Bucksville	86	39	64.8	2.57		Chapelhill†	99	51	72.2	2.66		Woodbridge†	93	26	59.7	4.08	
Boyd's Corners	.....	.....	.....	1.50		Edenton	95	56	75.0	4.53		<i>Ohio.</i>				
Brentwood	92	41	68.1	0.70		Fairbluff†	.....	.....	.....	2.27		Akron	92	41	69.8	1.76
Canajoharie	90	43	69.3	2.55		Fayettevillet	99	53	76.7	5.53		Annapolis	94	40	71.2	2.55	
Canton	88	41	66.4	3.93		Flatrock	93	47	70.6	3.66		Ashland	89	46	69.7	2.16	
Carmel	90	48	69.5	1.23		Goldsboro	104	53	78.3	2.53		Ashstabula	88	44	67.8	3.84	
Carvers Falls	86	38	65.1	3.57		Greensboro†	95	54	74.5	3.94		Atwater	.....	.....	2.60	.....
Catskill	91	46	68.4	3.30		Greenville	96	62	70.0	1.15		Bangorville	98	45	70.7	3.50	
Cedarhill	94	45	69.0	4.16		Henderson†	98	54	75.0	4.11		Bellefontaine	87	51	71.8	2.53	
Charlotte*10	86	43	61.9	.....		Hendersonville	92	48	71.1	5.71		Bement	.....	.....	4.84	.....
Chamango Forks	.....	.....	.....	2.75		Highlands	85	47	66.6	1.68		Benton Ridge	94	45	71.2	1.39
Cherry Creek	.....	.....	.....	5.51		Horse Cove	93	54	73.7	2.01		Bethany	96	54	72.2	2.44
Cooperstown†	87	44	65.9	3.80		Lenoir† ¹¹	90	58	73.5	3.20		Bigprairie	93	44	71.2	2.83	
Cortland	87	40	65.2	2.80		Linville†	83	40	64.8	4.58		Binola	.....	.....	4.55	.....
Dekalb Junction	.....	.....	.....	3.18		Littleton†	97	51	74.2	2.93		Bladensburg	94	40	69.7	2.68
Dryden	90	35	65.5	2.50		Louisburg†	99	53	73.9	1.63		Bloomingburg	92	47	72.0	1.18	
Elizabethtown	84	36	62.6	.....		Lumbertown†	99	57	78.8	2.29		Bowling Green	92	43	70.0	2.78
Elnira	90	40	69.3	3.43		Mans	.....	.....	.....	1.80		Bucyrus	94	46	70.7	2.46
Fayetteville	.....	.....	.....	2.14		Marion	97	52	73.6	3.88		Cambridge	91	41	69.2	2.91
Fleming	90	44	68.4	2.48		Moncure†	97	50	75.6	1.35		Camp Dennison	95	48	75.0	2.09	
Fort Niagara†	89	43	67.0	3.15		Monroe†	101	48	77.0	3.46		Canal Dover	91	43	70.4	3.39	
Franklinville	87	35	64.2	4.79		Morganton	94	56	74.2	3.51		Canton†	92	47	70.8	5.03	
Garrattsville	89	37	64.7	.....		Mountairty	93	49	72.0	3.49		Carrollton	94	42	75.1	3.91
Gloversville	89	39	65.9	5.14		Mount Pleasant	97	53	76.7	2.55		Cedaryville	.....	.....	2.29	.....
Greenwich	87	40	66.6	2.86		Murphy†	.....	.....	.....	3.75		Celina	96	44	71.4	1.79
Haskinsville	.....	.....	.....	3.95		Newbern	100	54	78.0	4.91		Chillicothe	93	47	73.4	1.66
Hemlock Lake	87	43	67.8	3.52		Oakridge†	97	50	74.4	2.15		Circleville	93	47	73.4	1.08	
Honeymead Brook	86	44	66.9	2.73		Pantego	.....	.....	.....	5.64		Clarksville	92	44	73.4	3.30
Humphrey†	86	40	65.0	6.87		Pittsboro†	95	49	74.2	2.72		Cleveland a.	88	49	69.1	3.75	
Ithaca	90	40	67.5	3.01		Rockingham†	102	54	79.4	4.26		Cleveland b.	90	49	69.4	3.90	
Jamesstown	87	44	67.0	5.01		Roxborot	95	50 ^b	72.2 ^b	5.68		Coalton	94	42	72.7	2.85	
Keene Valley	84	37	60.7	2.50		Salem†	97	50	75.6	2.39		Dayton a	96	46	73.7	3.24	
Kings Station	.....	.....	.....	3.24		Salisbury†	100	52	78.0	2.08		Dayton b†	.....	.....	2.95	.....
Lake George	85	40	66.0	3.35		Saxont	97	50	72.8	4.35		Defiance	89	46	69.5	3.31	
Lake Placid	82	38	61.7	4.82		Selma	101	50	78.6	3.77		Delaware	90	49	73.8	2.45	
Liberty	85	46	64.4	3.47		Settle	98	50	74.8	1.42		Demos	90	49	70.7	3.56	
Little Falls	86	40	66.1	4.52		Sloan†	98	55	77.8	7.32		Dupont	93	52	72.4	1.91	
Lockport	85	48	67.4	2.88		Soapstone Mount†	100	44	74.0	2.51		Elyria	95	46	70.2	5.48	
Lowville	87	35	64.4	2.57		Southern Pines a†	101	52	76.4	3.52		Fairport Harbor*10	87	54	69.1	.....
Lyndonville	.....	.....	.....	2.32		Southern Pines b	98	57	76.6	2.43		Findlay	95	45	71.8	1.97
Lyons	91	45	68.2	2.86		Southport†	88	58	76.5	3.24		Frankfort	91	42	75.2	1.65	
Madison Barracks†	90	40	64.2	2.50		Springhope*1	95	58	74.3	0.70		Garretttsville†	90	40	67.4	2.96	
Middletown	90	43	68.2	3.84		Tarboro	102	52	77.0	3.40		Granville	94	43	71.6	3.09	
Milford	.....	.....	.....	3.09		Waynesville†	91	48	70.4	3.11		Gratiot	91	45	71.4	3.43
Mohonk Lake	85	50	67.8	2.07		Weldon†	100	55	76.6	5.18		Greenfield	93 ^b	51	79.7	2.10	
Mount Morris	.....	.....	.....	2.40								Greenhill	90	39	68.0	5.18

TABLE II.—*Meteorological record of voluntary and other cooperating observers*—Continued.

TABLE II.—*Meteorological record of voluntary and other cooperating observers—Continued.*

Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.	
	Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.
<i>South Carolina—Cont'd.</i>	0	0	0	Inas.	Inas.	<i>Tennessee—Cont'd.</i>	0	0	0	Inas.	Inas.	<i>Texas—Cont'd</i>	0	0	0	Inas.	Inas.
St. Matthewst.	98	63	79.7	4.38		Lafayette* ^b	95	57	76.2	4.42		Marathon	96	48	71.6	2.89	
St. Stephens				6.54		Lewisburg* ^b	98	59	78.2	1.92		Marshall				9.00	
Santuck†	98	55	75.8	2.16		Liberty†	97	54	77.2	5.10		Menardville	98	60	78.2	8.26	
Shaws Fork* ¹	102	65	80.8	6.53		Lynnville†	95	61	77.6	3.17		Mount Blanco†	101	56	75.8	0.25	
Smiths Mills†				5.52		McKenzie†	93	53	77.9	6.45		New Braunfels†	100	64	81.5	7.60	
Spartanburg	99	59	79.0	3.83		McMinnville†	98	53	75.8	5.45		Panter				6.29	
Society Hill†	97	60	79.3	4.57		Madison	97	54	78.3	4.10		Paris	96	65	79.3	1.73	
Statesburg†	100	60	80.5	2.65		Maryville* ^b	100	54	77.5	3.10		Point Isabel* ¹	90	60	84.0	0.08	
Trenton	96	55	81.0	2.29		Milan	98	61	80.1	6.40		Rheinland†	101	60	79.8	2.13	
Trial	95	56	76.3	7.16		Newmarket* ^b	97	56	77.6	3.95		Roby				5.21	
Walhalla	97	56	76.1	1.85		Newport†	100	54	75.8	2.81		Rockport* ¹	88	72	80.2		
Winnboro	98	60	78.7	6.40		Nunnelly	93	55	75.8	3.54		Rocksprings				5.87	
Yemassee†	101	60	81.0	3.13		Oak Hill	96	54	75.5	5.62		Runge†	96	64	82.1	3.39	
Yorkville	102	59	79.9	3.54		Palmetto†	100	55	78.1	2.54		San Antonio	98	64	82.3	7.33	
<i>South Dakota.</i>						Silverlake	92	55	78.0	7.02		San Marcos†	96	64	80.4	6.85	
Aberdeen†	98	42	67.3	0.94		Springdale	99	42	74.8	2.42		Sugarland				5.47	
Alexandria†	96	43	68.3	3.89		Springfield	97	56	78.1	3.75		Temple a	94	63	78.8	5.92	
Ashcroft†	96	35	63.4	3.00		Sylvia	95	55	76.4	4.81		Temple b				4.37	
Bowdle	101*	36	65.4 ^c	1.28		Tazewell						Tulia				5.55	
Brookings†	91	42	66.3	1.94		Tellico Plains†	99	55	76.6	4.26		Tyler	98	63	79.7	2.69	
Canton	93	45	69.6	5.68		Tracy City	93	52	73.3	3.39		Valentine†	101	40	75.4		
Centerville				4.44		Trenton	93	58	76.8	3.73		Victoria				2.98	
Chamberlain†	100	46	71.4	0.97		Tullahoma†	96	54	74.8	2.60		Waco	98	68	83.8	3.54	
Desmet	91	42	66.9	1.97		Union City	95	61	78.8	3.10		Waxahachie†	90	64	78.5	8.60	
Doland	102	39	68.0	1.12		Waynesboro	94	56	76.2	3.18		Weatherford†	95	58	79.0	6.65	
Farmingdale				0.86		Wildersville	92	60	77.2	3.56		Wichita Falls†				4.85	
Flandreau	93	45	66.2	2.40		Yukon.	97	61	77.8	6.11		<i>Utah.</i>					
Forrestburg†	98	40	67.6	1.81		<i>Texas.</i>						Alpine†				1.43	
Forest City	103	44	70.4	0.85		Albany* ¹	92	64	78.2	5.30		Blue Creek* ¹	90	43	66.2	1.29	
Fort Meade†	95	42	64.8	2.70		Alvin						Cisco†	105	39	73.8	0.22	
Gann Valley	98	40	68.4	2.25		Anna						Corinne	99	32	66.4	0.56	
Gary	95	45	68.2	3.33		Anson						Ferron	100	33	68.4	0.43	
Goudyville	100	38	66.3	3.86		Arthur City†						Fillmore†	102	23	66.4	0.92	
Harney	93 ^a	32 ^a	62.0 ^a	1.96		Austin a.	100	60	82.6	5.04		Fort Duchesne†	97	33	64.8	0.45	
Hightmore	99 ^a	41 ^a	72.4 ^a	1.67		Austin b* ^c	95	62	77.4			Frisco	98	30	67.4	0.11	
Hitchcock				1.57		Ballinger†	99	59	75.9	10.85		Heber	94	32	61.4	0.83	
Hotch City†	101	39	68.2	0.90		Beeville†	100	62	82.6	2.05		Huntsville				0.80	
Hot Springs	100	41	66.8	0.33		Blanco†	95	60	79.2	6.14		Kelton* ¹	97	48	71.1	0.00	
Howard†	94	40	67.0	2.49		Boerne* ¹	94	67	78.7	6.71		Levan†	94	29	63.4	0.90	
Interior	110	40	70.3	T.		Brazoria†	92	67	80.2	5.10		Logan†	94	35	63.8	0.85	
Ipswich	93	41	65.6	1.66		Breckenridge	98	62	81.0	4.96		Millville				0.55	
Kimball†	99	41	68.2	2.36		Brenham†	93	65	80.8	4.05		Minersville	95	31	67.4	0.46	
Leslie†				1.92		Brighton	92	55	77.2	2.44		Moab†	102	38	72.0	0.16	
Mellette†	99	41	60.2	5.19		Brownwood	102	63	84.0	8.05		Mount Pleasant†	110	30	69.2	0.52	
Mennio†	97	43	69.8	3.43		Burnet†	94	64	77.2	4.53		Ogden a* ¹	98	38	71.5	0.81	
Millbank	97	40	65.7	3.52		Childress	101	57	78.6	6.01		Pahreah	101	38	69.8	1.20	
Mitchell†	96	41	67.8	2.58		Coleman	96	60	77.0	9.08		Parowan†	92	30	64.9	0.24	
Montröse†	92	45	66.0	2.42		College Station ²	93	57	79.7	5.15		Pinto	92	25	60.6	0.25	
Nowlin	106	38	68.6	0.13		Comesneil						Promontory* ¹	92	36	60.2	1.50	
Oelrichs†	105	40	69.2	1.00		Columbia†	90	66	79.4	5.44		Provo	100	32	66.4	1.55	
Parker†				5.09		Conroe	99	67	81.2	4.40		Richfield†	93	28	59.0	1.00	
Parkston	96	37	65.7	2.85		Corsicana b†	99	62	81.4	9.25		St. George†	108	40	76.2	2.39	
Plankinton†	99	39	69.0	2.13		Cuero†	95	65	81.8	2.89		Scipio†	98	34	64.1	1.10	
Redfield	99	40	67.0	1.18		Dallas†	95	62	78.6	9.18		Soldier Summit	95	22	57.5	0.13	
Rochford				1.57		Danevang†	99	66	82.0	6.06		Terrace†	94	27	61.8	2.25	
Rosebud	103	36	69.3	0.60		Dublin†	96	62	78.2	6.63		Thistle	100	28	62.8	0.00	
Shiloh	106	38	67.0	1.35		Duval†	102	63	83.7	3.13		Tooelet†	93	32	66.2	1.58	
Silver City				1.68		Emory	91	64	77.0	7.05		Tropic	106	27	63.0	0.81	
Siox Falls†	97	45	69.0	5.27		Estelle†	97	62	78.2	6.73		Woodruff	86	28	55.3	0.93	
Spearfish†	94	38	63.2	1.35		Forestburg	98	62	78.3	6.65		Vermont					
Tyndall†	96	44	68.4	2.30		Fort McIntosh	104	67	85.0	2.83		Bennington	90	40	66.1	4.60	
Watertown	92	36	64.6	1.65		Fort Ringgold†	103	60	82.4	2.34		Brattleboro	91	39	67.6	4.47	
Wentworth†	95	42	66.9	1.91		Fort Stockton						Burlington†	94	50	67.2	2.93	
Wessington Springs	93	39	65.6	0.94		Fredericksburg* ¹	95	67	78.3	5.85		Chestertown	93	50	67.8	2.24	
Whiteswan				1.68		Fruitland	97	62	76.1	8.99		Cornwall	95	41	64.7	3.23	
Wolsey				2.68		Gainesville	92	65	78.0	5.19		Emosburg Falls	97	39	64.5	3.45	
<i>Tennessee.</i>						Golind†						Hartland†	94	35	63.1	4.18	
Andersonville	98	52	75.4	1.41		Grapevine	98	64	78.0	7.05		Jacksonville	85	34	63.9	3.02	
Arlington	97	61	79.6	2.69		Hale Center†	99	58	74.3	4.91		Norwich	89	34	63.6	3.85	
Ashwood	94	56	77.2	2.90		Hallettville†	97	66	82.5	3.97		St. Johnsbury	94	38	64.0	3.55	
Benton (near)†	101	53	76.8	4.14		Haskell	100	58	78.8	3.68		Vernon * ⁶	91	50	68.1	6.95	
Bluff City†	94	58	77.7	1.63		Hearne	98	68	83.8	2.45		Wells	85	34	65.2	3.57	
Bristol†	94	50	72.6	3.49		Henrietta	98	63	81.0	2.58		Woodstock	85	34	62.2	2.37	
Brownsville	97	62	80.5	2.39		Hewitt						Virginia.					
Byrdstown	95	53	74.6	3.40		Honeygrove						Alexandria	98	51	75.4	0.45	
Carthage†	98	55	78.1	4.94		Houston†	93	68	80.0	6.46		Ashland†	98	53	74.3	3.94	
Clarksville	92	59	77.1	4.49		Hulen	98	64	80.4	4.89		Ballsville	99	55	76.4	2.08	
Clinton†																	

TABLE II.—*Meteorological record of voluntary and other cooperating observers—Continued.*

Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		Stations	Temperature. (Fahrenheit.)			Precipita- tion.		Stations.	Temperature. (Fahrenheit.)			Precipita- tion.		
	Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.		Maximum.	Minimum.	Mean.	Rain and melted snow.	Total depth of snow.	
<i>Virginia—Cont'd.</i>						<i>West Virginia—Cont'd.</i>						<i>New Brunswick.</i>						
Maidens	o	o	o	Ins.	Ins.	Point Pleasant	o	o	o	Ins.	Ins.	St. John	o	o	o	Ins.	Ins.	
Manassas	100	47	73.7	1.10		Powellton	97	48	74.7	2.87								
Marion	96 ^a	45 ^a	71.4 ^a	4.10		Romney	93	48	60.6	2.76								
Miller School	95	51	73.2	3.63		Rowlesburg	94	45	71.4	0.97								
Petersburg	99	54	74.0	2.57		Upper Tract	94	39	70.2	2.57								
Radford				3.59		Weston a				3.44								
Richmond (near)†	99	53	73.8	2.34		Weston b ^{*1}	91	50	72.3	.....							
Rockymount	95	50	74.0	3.34		Wheeling a†				2.98								
Salem	90	53	73.5	2.82		Wheeling b†	94	50	76.2	2.89								
Speers Ferry				4.71		<i>Wisconsin.</i>												
Spottsville	99	52	75.0	3.80		Amherst	90	39	67.5	2.40								
Stanardsville	94	47	71.3	2.51		Barron	88	34	60.9	2.27								
Staunton	95	45	71.5	2.16		Bayfield	94	40	60.0	1.90								
Stephens City	98	48	72.8	1.49		Beloit	89	46	67.0	9.70								
Sunbeam†	96	53	74.0	2.99		Brookhead	91	43	69.2	7.30								
Warrenton	97	57	76.0	1.44		Chilton	90	37	67.0	2.02								
Warsaw	99	51	73.9	1.64		Citypoint	92	38	68.0	3.38								
Westbrook Farm	99	54	74.5			Delavan	90	40	69.0	6.21								
Westpoint	94	44	71.9	3.85		Dodgeville†	88	45	68.4	5.91								
Woodstock	97	45	71.6	1.12		Easton	92	38	68.4	3.00								
Wytheville	92	45	70.4	2.17		Eau Claire	93	45	69.0	1.50								
<i>Washington.</i>						Florence†	87	31	62.9	3.77								
Aberdeen	94	43	60.5	3.35		Fond du Lac	92	40	67.4	1.81								
Ashford				4.61		Grand River Locks				5.19								
Blaine†	85	32	56.7	2.65		Grantsburg†	95	40	67.1	6.00								
Brinmon	83	45	60.4	2.85		Gratiot	90	38	68.1	9.22								
Centerville	97	31	60.9	0.85		Hartford				4.40								
Clearwater	91	42	58.8	8.56		Hartland	91	41	67.7	1.98								
Colfax				0.70		Harvey	91	42	69.2	4.01								
Coupeville†	85	42	60.3	2.89		Hayward	91	38	65.6	7.18								
Dayton	93	35	63.0	0.98		Heafford Junction ^{*1}	96	46	65.8	5.28								
Ellensburg	88	34	62.2	0.73		Hillsboro	90	39	68.0	2.14								
Ellensburg (near)	96	40	64.6	0.86		Knapa	94	36	66.5	4.86								
Fort Simcoe†	95	33	63.8	0.35		Koepenick ^{*1}	84	48	65.7	5.20								
Fort Spokane	94	35	62.4	0.80		Lancaster†	92	48	69.8	4.18								
Grandmound†	92	39	60.5	3.04		Lincoln	92	41	64.0	3.78								
Hunters†	82	28	54.5	1.45		Madison†	86	54	69.1	4.40								
Kennewick†	103	40	69.8	0.34		Manitowoc†	93	42	62.3	2.15								
Lacenter	93	37	61.6	2.19		Meadow Valley†	90	40	67.3	6.07								
Lakeside	87	44	64.4	1.54		Medford†	94	34	66.7	6.85								
Lapush	82	38	55.7	6.82		Menasha				3.35								
Loomis†	90	39	65.4	1.94		Neillsville	90	40	66.7	3.15								
Madrone†	86	40	59.8	1.85		New London	92	39	66.4	2.78								
Moxee Valley†	96	34	65.0	0.29		North Crandon				1.55								
New Whatcom	76	40	58.1	2.95		Oconto	92	37	65.0	2.79								
Northbend	89	35	60.8	4.89		Osceola†	93	41	65.6	4.92								
Olga	80	40	56.9	2.15		Pepin	94	43	68.4	2.38								
Olympia†	91	39	60.3	2.68		Pine River†	90	41	67.2	3.46								
Orcas Island	84	47	61.0	2.24		Portage†	93	41	67.9	2.72								
Pinehill†	94	41	62.8	1.03		Port Washington	94	40	65.0	2.41								
Pomeroy	90	46	66.9	0.40		Prairie du Chien	94	48	72.4	2.26								
Port Townsend	79	42	57.9	2.91		Prentice ^{*1}	90	46	61.4	4.97								
Pullman†	88	46	60.2	1.54		Racine	92	45	66.8	2.44								
Rosalia†	86	31	58.8	0.40		Sharon	90	38	65.9	8.37								
Sedro†	88	39	61.5	4.71		Shawano	90	40	65.3	2.68								
Shoalwater Bay ^{*10}	86	45	58.4			Sheboygan ^{*10}	90	45	63.2									
Snohomish†	88	50	65.2	1.96		Spooner	92	42	63.9	7.81								
Southbend	91	40	58.9	3.75		Stevens Point†	91	41	67.0	5.16								
Stampede	88	36	56.6	3.72		Sturgeon Bay Canal ^{*10}	80	42	59.9									
Sunnyside†	97	36	66.6	0.49		Two Rivers ^{*10}	82	46	62.4									
Union City†	88	40	59.8	3.40		Valley Junction†	89	43	66.8	3.88								
Vancouver	90	40	61.2	2.01		Viroqua	90	47	62.0	2.22								
Vashon†	85	43	59.2	2.21		Watertown†	89	42	67.9	4.63								
Waterville	94	32	57.8	1.50		Waukesha†	90	45	67.5	1.54								
<i>West Virginia.</i>						Wauwatosa†	93	41	62.8	3.24								
Beckley	86	43	66.6	2.06		Wausau†	89	42	65.9	2.07								
Beverly†	91	42	67.0	2.76		Westfield†	90	42	67.4	2.84								
Buckhannon†				3.97		Whitehall	93	41	69.1	2.90								
Burlington†	95	43	70.2	0.66		<i>Wyoming.</i>												
Charleston†				3.58		Basin				0.80								
Dayton†	94	41	70.4	1.77		Big Horn Ranch	88	38	53.4	2.32	3.0							
Eastbank	94	54	73.0	4.40		Big Piney	88	29	54.2	0.55								
Elkhorn†	91	46	69.9	5.87		Carbon	97	29	62.0	1.41	T.							
Fairmont†				3.36		Evanston	89	29	55.6	1.29	4.0							
Glenville†	89	48	70.0	3.80		Fort Laramie†	99	34	66.8	1.27								
Grafton†	92	43	69.7	4.48		Fort Washakie	88	32	59.2	2.87	14.5							
Green Sulphur	90	48	69.8	2.13		Fort Yellowstone†	87 ^b	31	55.2 ^b	2.67								
Harpers Ferry				1.08		Green River	94	29	63.7									
Hinton†				2.80		Laramie				0.90								
Hinton b†	95	51	72.0			Lovell	96	34	63.3	1.20								
Huntington	96	48	74.4	4.36		Lusk†	98	33	64.0	2.09								
Kingwood	87	44	67.8	4.98		Sheridan	90	34	59.4	1.11								
Marlinton†	87	41	66.9	7.50		Sundance	86	39	61.8	1.86								
Martinsburg†	99	47	71.6	1.43		Wheatland	97	38	65.0	1.65								
Morgantown b†	91	47	71.4	5.17		<i>Mexico.</i>												
New Cumberland	93	46	72.7	4.00		Ciudad P. Diaz	96	62	82.7	8.55								
New Martinsville	97	48	75.2	2.34		Leon de Aldamas	90	54	71.4	4.79								
Nuttallburg	88	41	67.2	3.10		Puebla	81	45	62.2	4.32								
Oldfields†	93	49	69.2	1.81		Topolobampo	88	74	88.5	T.								

No note is made of breaks in the continuity of temperature records when the same do not exceed two days. All known breaks, of whatever duration, in the precipitation record receive appropriate notice.

TABLE III.—Data furnished by the Canadian Meteorological Service, June, 1898.

Stations.	Pressure.			Temperature.			Precipitation.			Stations.	Pressure.			Temperature.			Precipitation.		
	Mean not reduced.	Mean reduced.	Departure from normal.	Mean.	Departure from normal.	Mean max-min.	Total.	Departure from normal.	Depth of snow.		Mean not reduced.	Mean reduced.	Departure from normal.	Mean.	Mean max-min.	Total.	Departure from normal.	Depth of snow.	
St. Johns, N. F.....	In.	In.	-0.8	51.9	+ 0.3	60.9	42.9	2.68	.....	Saugeen, Ont.....	In.	In.	o	63.0	+ 2.6	72.1	53.9	3.86	+1.49
Sydney, C. B. I.....	29.75	29.80	-0.8	55.8	+ 0.4	65.3	46.4	2.04	-1.65	Parry Sound, Ont.....	29.27	29.98	+ 0.2	63.1	+ 1.4	73.4	52.8	3.45	+1.24
Halifax, N. S.....	29.82	29.99	+ 0.5	57.6	- 0.1	65.1	50.0	5.50	+1.69	Port Arthur, Ont.....	29.23	29.92	+ 0.1	54.5	- 1.9	64.0	45.0	6.94	+4.13
Grand Manan, N. B.....	29.83	29.94	+ 0.2	55.7	- 0.5	63.1	48.4	2.96	+0.66	Winnipeg, Man.....	29.06	29.87	+ 0.2	60.3	- 1.9	71.7	49.0	6.10	+2.26
Yarmouth, N. S.....	29.80	29.98	+ 0.5	54.7	- 0.3	61.9	47.5	2.03	-0.11	Minnedosa, Man.....	29.12	29.88	+ 0.6	59.2	- 0.4	70.7	47.8	2.96	-0.83
Charlottet'N, P. E. I.....	29.90	29.94	-0.0	58.1	+ 0.7	64.4	51.9	2.76	+0.01	Qu'Appelle, Assin.....	27.64	29.85	+ 0.3	58.8	- 1.1	71.6	46.1	4.60	+1.25
Chatham, N. B.....	29.90	29.92	-0.2	59.7	- 0.3	69.4	50.0	4.62	+0.33	Medicine Hat, Assin.....	27.62	29.85	+ 0.6	61.9	- 0.1	75.2	48.6	1.51	-1.52
Father Point, Que.....	29.88	29.91	+ 0.5	53.8	+ 0.3	68.0	43.6	2.60	-0.09	Swift Current, Assin.....	27.37	29.89	+ 0.7	59.8	- 0.2	72.2	47.4	2.56	-0.99
Quebec, Que.....	29.60	29.92	-0.3	60.9	- 0.3	69.9	51.8	6.14	+2.87	Calgary, Alberta.....	26.30	29.85	0.0	56.4	+ 0.4	70.3	42.6	3.21	+0.87
Montreal, Que.....	29.73	29.93	-0.3	64.8	- 0.1	72.9	56.6	5.57	+2.38	Banff, Alberta.....	25.35	29.92	.....	51.1	.....	64.3	37.9	2.15	.....
Rockcliffe, Ont.....	29.43	29.93	+ 0.3	63.5	+ 2.1	75.3	51.7	4.59	+1.84	Edmonton, Alberta.....	27.57	29.82	-0.2	59.0	+ 2.1	73.8	44.2	2.80	+0.61
Ottawa, Ont.....	29.62	29.97	-0.6	66.2	+ 0.9	76.8	55.2	2.24	.....	Prince Albert, Sask.....	28.15	29.85	.....	59.7	+ 0.2	72.5	49.9	4.24	.....
Kingston, Ont.....	29.64	29.95	+ 0.1	64.2	+ 0.8	71.4	57.0	1.81	-0.59	Battleford, Sask.....	28.15	29.85	.....	59.7	+ 0.2	72.5	49.9	4.24	.....
Toronto, Ont.....	29.60	29.97	+ 0.1	66.3	+ 2.9	76.2	56.5	1.95	-0.77	Kamloops, B. C.....	29.96	29.99	.....	57.8	+ 1.3	66.6	49.1	1.85	.....
White River, Ont.....	28.64	29.97	-0.3	56.6	- 2.1	69.2	44.0	3.62	+1.65	Esquimalt, B. C.....	29.92	30.08	-0.4	74.1	- 0.9	79.6	68.6	7.70	.....
Port Stanley, Ont.....	29.36	29.98	+ 0.3	65.3	+ 1.5	75.6	55.1	2.67	-0.35	Hamilton, Bermuda.....	29.92	30.08	.....	74.1	- 0.9	79.6	68.6	7.70	.....

TABLE IV.—Mean temperature for each hour of seventy-fifth meridian time, June, 1898.

Stations.	1 a. m.	2 a. m.	3 a. m.	4 a. m.	5 a. m.	6 a. m.	7 a. m.	8 a. m.	9 a. m.	10 a. m.	11 a. m.	Noon.	1 p. m.	2 p. m.	3 p. m.	4 p. m.	5 p. m.	6 p. m.	7 p. m.	8 p. m.	9 p. m.	10 p. m.	11 p. m.	Midnight.	Mean.		
	1 a. m.	2 a. m.	3 a. m.	4 a. m.	5 a. m.	6 a. m.	7 a. m.	8 a. m.	9 a. m.	10 a. m.	11 a. m.	Noon.	1 p. m.	2 p. m.	3 p. m.	4 p. m.	5 p. m.	6 p. m.	7 p. m.	8 p. m.	9 p. m.	10 p. m.	11 p. m.	Midnight.	Mean.		
Bismarck, N. Dak.....	59.6	58.9	57.8	57.0	56.1	55.1	55.5	57.1	58.7	61.7	64.6	66.8	70.4	72.1	73.0	73.8	73.5	72.6	71.4	69.5	66.4	64.4	63.8	61.9	64.4		
Boston, Mass.....	61.6	61.2	60.6	60.3	60.1	60.5	61.9	63.8	65.7	66.6	67.8	69.0	69.4	70.6	69.6	69.9	69.5	68.4	66.5	64.4	62.7	60.7	58.5	56.3	55.3		
Buffalo, N. Y.....	64.1	63.5	63.1	63.0	62.7	63.1	64.7	65.5	67.0	68.1	69.3	69.8	71.3	71.7	71.7	71.0	69.2	68.1	66.8	64.8	62.7	60.7	58.5	56.3	54.4		
Chicago, Ill.....	65.6	65.2	64.7	64.2	63.9	63.9	64.5	66.5	68.3	69.9	71.0	72.1	72.8	73.6	73.3	72.7	71.9	70.8	68.8	66.8	64.8	62.7	60.7	58.5	56.3		
Cincinnati, Ohio.....	71.7	70.6	69.6	68.7	67.5	66.9	67.8	70.4	72.6	74.7	77.2	78.6	80.3	82.2	83.4	84.4	83.9	82.0	80.3	78.1	76.4	74.4	72.4	70.5	68.6		
Cleveland, Ohio.....	65.2	64.4	63.5	63.1	62.8	63.0	64.6	66.6	68.5	69.3	70.7	71.7	72.0	72.3	72.6	72.9	72.9	72.6	71.6	70.3	69.6	68.2	67.2	66.6	65.6		
Detroit, Mich.....	64.3	63.5	62.8	62.1	61.6	61.6	63.6	66.0	68.8	71.2	72.8	74.2	75.5	76.1	76.5	77.3	76.5	76.0	74.0	72.6	70.9	69.7	68.7	66.7	65.5		
Dodge, Kans.....	68.3	67.6	67.0	66.3	65.5	64.8	64.3	65.7	68.5	71.3	72.6	75.6	78.5	80.4	81.5	81.8	82.0	81.6	80.8	78.7	75.5	73.8	71.9	69.9	67.4		
Eastport, Me.....	50.5	50.1	49.6	49.4	49.3	50.0	51.3	52.9	54.5	56.7	57.2	57.8	58.6	59.0	58.2	56.9	55.2	53.6	52.1	51.7	50.2	48.8	47.8	45.8	43.8		
Galveston, Tex.....	79.8	79.5	79.5	79.3	79.0	78.8	79.0	79.6	80.9	81.3	82.5	82.7	83.8	83.7	83.7	82.9	82.4	81.9	81.1	80.5	80.2	80.2	81.1	81.1	81.1		
Havre, Mont.....	58.5	58.8	59.8	59.4	59.2	59.4	59.1	59.6	59.2	59.6	59.8	61.5	63.5	65.0	67.0	68.2	69.2	68.0	68.0	67.7	67.5	67.5	67.5	67.5	67.5		
Kansas City, Mo.....	71.9	71.2	70.5	70.1	69.5	69.0	68.9	70.1	72.6	74.5	76.5	78.3	80.0	81.3	82.2	82.9	82.3	81.1	79.3	77.4	75.5	73.4	71.5	69.6	67.7	65.8	
Key West, Fla.....	79.8	79.6	79.5	79.5	79.3	79.5	80.5	82.1	83.4	84.3	84.8	85.7	86.4	87.4	88.4	89.4	89.5	89.0	88.6	87.7	86.7	85.4	84.2	82.1	80.2	78.1	
Memphis, Tenn.....	75.8	75.0	74.2	73.5	72.9	72.3	73.6	73.5	77.5	80.2	82.3	85.3	86.4	88.3	89.5	89.6	89.6	88.6	87.1	85.0	84.0	82.1	80.0	78.8	76.8	74.8	
New Orleans, La.....	76.6	76.1	75.8	75.5	75.3	75.2	75.4	77.2	80.1	82.4	84.5	86.3	86.4	87.5	88.1	88.6	87.7	87.0	86.0	85.0	84.0	82.8	81.3	79.2	77.2	75.9	
New York, N. Y.....	64.5	63.7	63.3	62.6	62.2	62.3	63.6	65.8	68.0	70.2	71.9	73.4	74.2	74.8	74.5	74.2	72.9	71.6	70.4	68.9	67.7	66.1	65.4	63.8	62.3	60.8	
Philadelphia, Pa.....	65.9	65.3	64.8	64.1	63.9	64.8	67.1	69.2	71.7	73.9	76.0	78.1	79.0	80.3	81.4	81.7	81.9	81.2	80.3	79.7	77.8	75.5	73.9	72.4	70.8	69.0	67.0
Pittsburg, Pa.....	62.2	62.8	62.6	61.6	61.4	61.0	60.8	62.1	63.7	65.6	67.9	70.3	72.4	73.7	75.0	75.7	75.5	75.5	74.1	72.0	70.6	69.1	67.0	65.0	63.0	61.0	
Portland, Oreg.....	61.8	62.0	59.3	58.2	56.9	55.3	55.0	54.4	54.1	55.7	57.5	59.5	61.8	63.5	64.7	66.8	68.0	69.2	69.4	69.5	68.2	67.0	66.0	64.8	63.1	62.1	
Portland, Oreg.....	61.8	62.0	59.3	58.2	56.9	55.3	55.0	54.4	54.1	55.7	57.5	59.5	61.8	63.5	64.7	66.8	68.0	69.2	69.4	69.5	68.2	67.0	66.0	64.8	63.1	62.1	
Portland, Oreg.....	61.8	62.0	59.3	58.2	56.9	55.3	55.0	54.4	54.1	55.7	57.5	59.5	61.8	63.5	64.7	66.8	68.0	69.2	69.4	69.5	68.2	67.0	66.0	64.8	63.1	62.1	
Portland, Oreg.....	61.8	62.0	59.3	58.2	56.9	55.3	55.0	54.4	54.1	55.7	57.5	59.5	61.8	63.5	64.7	66.8	68.0	69.2	69.4	69.5	68.2	67.0	66.0	64.8	63.1	62.1	
Portland, Oreg.....	61.8	62.0	59.3	58.2	56.9	55.3	55.0	54.4	54.1	55.7	57.5	59.5	61.8	63.5	64.7	66.8	68.0	69.2	69.4	69.5	68.2	67.0	66.0	64.8	63.1	62.1	
Portland, Oreg.....	61.8	62.0	59.3	58.2	56.9	55.3	55.0	54.4	54.1	55.7	57.5	59.5	61.8	63.5	64.7	66.8	68.0	69.2	69.4	69.5	68.2	67.0	66.0	64.8	63.1	62.1	
Portland, Oreg.....	61.8	62.0	59.3	58.2	56.9	55.3	55.0	54.4	54.1	55.7	57.5	59.5	61.8	63.5	64.7	66.8	68.0	69.2	69.4	69.5							

TABLE VI.—Average wind movement for each hour of seventy-fifth meridian time, June, 1898.

Stations.	1 a. m.	2 a. m.	3 a. m.	4 a. m.	5 a. m.	6 a. m.	7 a. m.	8 a. m.	9 a. m.	10 a. m.	Noon.	1 p. m.	2 p. m.	3 p. m.	4 p. m.	5 p. m.	6 p. m.	7 p. m.	8 p. m.	9 p. m.	10 p. m.	11 p. m.	Midnight.	Mean.	
Abilene, Tex.	8.5	8.0	7.8	6.8	7.3	6.7	6.0	7.2	8.4	9.9	10.3	11.2	11.3	10.8	11.0	11.1	11.0	11.7	11.2	10.5	9.4	8.6	8.8	9.3	
Albany, N. Y.	5.0	4.9	4.6	4.5	4.5	5.8	6.0	6.5	7.9	8.3	8.6	8.5	9.3	8.9	9.1	9.0	8.0	7.2	6.5	5.1	4.5	4.6	4.5	6.5	
Alpena, Mich.	5.0	4.4	5.0	5.9	6.0	6.9	6.7	7.2	9.0	9.2	10.3	10.8	11.5	11.9	12.7	12.2	12.1	11.8	10.7	8.1	6.3	6.1	5.2	8.4	
Amarillo, Tex.	15.1	16.2	15.2	16.1	15.7	14.8	13.1	12.2	13.9	16.2	16.4	15.2	14.7	14.4	14.5	15.1	16.0	15.7	14.0	13.8	14.8	16.3	15.0		
Atlanta, Ga.	6.9	7.1	7.0	7.0	7.2	7.0	6.8	7.4	7.4	7.6	8.3	8.6	9.0	8.9	9.2	9.2	8.7	8.4	7.8	6.1	6.4	7.0	7.7	7.6	
Atlantic City, N. J.	9.5	9.5	9.5	9.7	9.6	10.1	10.9	11.3	12.0	12.0	12.1	12.6	12.1	11.7	11.5	11.0	10.3	9.8	9.3	8.6	8.9	9.2	9.0	10.5	
Augusta, Ga.	4.6	4.3	3.9	2.4	2.4	2.8	3.4	4.9	5.9	6.3	6.4	6.6	7.4	8.0	8.1	7.6	7.8	8.2	7.1	6.5	5.9	5.8	4.6	4.3	5.7
Baker City, Oreg.	3.6	4.1	4.5	4.7	4.9	6.0	5.6	5.7	5.2	3.7	2.9	3.5	4.7	4.7	5.6	6.9	7.6	8.6	7.8	8.1	7.5	6.0	5.4	5.5	
Baltimore, Md.	3.9	3.7	3.6	3.2	3.3	3.4	3.9	4.4	5.6	6.0	6.2	6.7	7.0	7.3	7.4	7.3	7.3	6.8	6.0	5.1	5.0	4.0	3.8	5.2	
Bismarck, N. Dak.	8.3	8.2	8.4	8.8	8.4	9.0	9.7	10.9	11.8	12.1	13.0	13.5	13.6	13.6	13.6	13.1	13.0	11.3	9.9	8.9	8.3	7.9	10.7		
Block Island, R. I.	11.6	12.0	12.2	12.1	11.7	12.6	12.4	12.8	12.8	12.8	13.6	14.0	14.5	15.6	15.2	15.5	15.8	15.4	14.3	13.7	12.4	12.2	13.4		
Boston, Mass.	9.2	9.5	9.6	9.3	8.7	9.0	9.9	10.0	11.0	12.0	12.5	12.4	12.9	13.1	13.3	13.2	12.7	11.7	11.0	10.1	9.9	10.0	9.8	10.8	
Buffalo, N. Y.	9.9	10.8	11.3	11.5	11.9	12.3	12.6	14.5	14.8	14.8	15.4	15.4	15.7	15.7	15.5	15.7	15.1	15.0	12.8	11.5	11.2	10.4	13.2		
Cairo, Ill.	4.9	5.1	5.3	6.1	5.4	5.4	5.2	6.1	6.4	6.6	7.5	7.9	7.7	8.5	9.1	9.0	8.4	7.6	6.3	5.4	5.3	5.0	4.9	6.4	
Cape Henry, Va.	12.1	12.6	12.1	12.1	12.1	12.2	12.7	13.2	13.1	13.1	13.4	13.1	12.3	12.6	13.0	12.9	13.0	12.5	12.3	11.9	10.9	11.1	11.9	12.4	
Carson City, Nev.	9.1	8.7	7.7	7.0	6.2	4.9	5.1	4.1	3.6	3.2	4.1	5.0	6.3	8.3	10.0	11.7	13.6	14.8	15.6	14.5	13.7	13.0	11.2	9.1	8.8
Charleston, S. C.	9.1	8.1	7.9	7.5	7.3	7.1	7.5	8.9	9.0	9.1	9.0	10.1	11.8	13.5	15.0	15.1	14.8	13.8	12.3	11.3	10.6	10.5	10.1	9.7	10.4
Charlotte, N. C.	5.4	5.0	5.4	5.7	5.5	5.3	5.5	6.5	7.2	6.9	6.8	6.2	6.8	7.5	7.8	8.2	7.1	6.7	5.7	5.0	5.1	5.4	6.2		
Chattanooga, Tenn.	8.1	8.7	4.1	2.7	4.1	3.8	3.9	4.6	6.3	7.3	7.6	7.3	7.9	8.1	8.6	8.6	8.3	7.7	7.5	5.8	4.8	3.9	5.8	5.8	
Cheyenne, Wyo.	7.6	7.5	6.9	6.7	6.1	5.7	5.4	5.6	5.7	7.9	9.8	10.8	12.2	12.4	13.1	13.6	14.4	13.6	12.4	12.5	11.8	10.0	8.5	9.5	
Chicago, Ill.	14.8	14.6	14.9	15.0	14.9	15.6	14.9	14.4	14.1	14.9	14.6	14.9	16.1	16.7	17.0	17.0	16.8	16.5	16.0	15.4	14.5	14.0	13.9	14.7	15.3
Cincinnati, Ohio	4.4	4.5	3.9	3.8	3.6	3.1	3.8	5.2	6.1	7.3	7.8	8.5	8.2	9.1	9.9	9.4	9.3	8.9	8.6	6.7	5.6	5.3	4.3	4.6	6.3
Cleveland, Ohio	11.8	12.4	12.2	11.8	11.4	11.3	10.3	10.7	11.7	12.0	12.1	13.0	13.5	13.5	13.2	12.9	13.0	12.3	11.2	10.8	10.2	11.1	11.0	11.9	
Columbia, Mo.	5.7	5.3	5.5	5.4	5.0	5.1	5.0	5.8	6.7	6.7	7.6	7.4	7.6	7.2	7.2	7.3	7.5	7.0	6.2	4.8	5.0	5.1	5.5	6.1	
Columbus, Ohio	4.9	5.1	5.1	4.8	4.2	4.8	4.9	5.3	6.1	7.4	7.9	8.1	8.4	8.6	8.9	9.1	9.0	8.0	6.4	5.9	5.7	5.0	6.6		
Concordia, Kans.	5.4	5.3	4.6	4.7	4.8	4.5	4.5	5.7	7.2	8.3	8.1	9.0	8.8	9.0	9.9	9.2	9.0	8.6	8.5	7.5	5.5	4.4	4.9	5.8	
Corpus Christi, Tex.	14.7	13.5	11.7	10.1	9.0	8.5	8.3	7.7	8.5	10.0	10.7	12.4	14.7	16.0	16.5	17.1	16.8	17.7	18.3	17.9	17.5	16.0	15.5	18.6	
Davenport, Iowa	5.0	5.5	5.0	5.1	5.5	4.9	5.6	6.7	7.4	8.0	8.6	8.8	9.1	9.3	9.3	8.9	8.4	8.6	8.2	7.8	6.5	5.0	4.8	6.8	
Denver, Colo.	6.6	6.3	6.6	7.3	6.7	6.1	5.8	5.1	5.0	4.7	6.2	6.6	7.6	7.9	8.5	9.7	11.5	11.0	10.8	10.0	9.3	8.1	7.7		
Des Moines, Iowa	5.6	5.6	5.8	5.9	6.0	5.8	5.4	6.7	7.5	8.7	9.4	10.3	11.0	11.3	11.2	10.8	10.9	10.2	9.1	7.7	5.7	5.4	7.8		
Detroit, Mich.	6.8	7.1	7.1	6.7	6.9	6.5	6.8	7.1	8.5	9.1	9.8	10.9	11.6	12.0	11.7	11.0	10.6	9.5	8.7	7.6	7.1	6.9	6.9	8.5	
Dodge, Kans.	10.3	10.2	9.5	9.2	8.4	7.8	7.5	8.0	8.8	11.3	12.6	13.1	12.8	13.4	14.1	14.2	14.7	14.5	14.2	13.1	12.2	10.6	10.8	11.4	
Dubuque, Iowa	4.8	4.8	5.3	5.3	5.2	4.9	5.1	6.3	7.0	7.8	8.2	8.4	8.9	9.1	9.4	9.0	8.8	8.3	7.5	6.0	5.5	5.3	4.9	6.7	
Duluth, Minn.	7.6	7.7	8.0	8.5	8.6	8.3	7.6	7.3	7.6	9.1	9.3	10.8	11.0	11.2	11.4	11.1	11.6	10.6	9.6	8.1	7.3	7.9	8.9		
Eastport, Me.	7.4	7.4	6.8	6.6	6.6	7.4	7.3	6.9	7.6	8.7	9.6	11.0	10.5	11.2	11.2	10.8	10.7	9.2	9.5	8.3	7.7	7.4	8.5		
Eli Paso, Tex.	10.0	10.2	8.8	9.0	10.2	9.2	7.9	7.8	8.0	8.6	9.1	9.2	9.7	10.0	10.9	11.6	10.9	12.1	12.2	11.2	10.0	9.5	10.5	10.0	
Erie, Pa.	7.3	8.0	8.1	7.9	8.6	8.7	8.4	9.3	9.6	10.0	10.8	10.6	11.2	11.7	12.0	11.1	10.9	10.0	9.1	7.4	7.1	7.8	8.9		
Eureka, Cal.	7.4	7.9	7.9	7.2	6.2	5.2	4.9	5.4	5.0	5.2	5.2	6.4	8.3	9.8	10.8	12.1	12.8	12.9	13.1	13.2	10.0	8.6	8.7		
Evansville, Ind.	4.6	4.8	4.9	4.6	4.7	5.1	5.1	6.1	6.4	7.0	7.5	8.2	8.4	8.6	8.5	8.7	9.2	8.8	8.4	6.6	5.6	5.0	4.5	6.5	
Fort Canby, Wash.	13.3	12.9	12.1	12.1	10.6	9.7	10.1	11.3	12.3	11.9	11.8	12.2	13.0	12.3	12.4	11.8	11.2	13.1	13.3	13.8	13.1	12.2	12.2		
Fort Smith, Ark.	3.3	4.0	4.0	4.1	4.3	4.1	4.1	4.6	5.2	5.5	6.0	7.5	8.7	9.1	9.7	10.2	10.0	10.1	10.4	9.7	8.7	8.4	7.8		
Fresno, Cal.	10.1	10.2	10.0	8.9	8.4	7.9	7.2	6.4	6.5	6.6	6.1	6.0	6.2	5.8	5.6	5.7	6.3	6.3	7.2	7.8	8.5	8.3	9.1	7.4	
Galveston, Tex.	9.0	9.1	8.9	8.4	8.4	7.7	7.4	7.5	8.0	8.2	8.6	9.5	9.4	10.2	10.5	10.8	11.1	10.9	10.1	9.6	9.3	9.2	9.0		
Grand Haven, Mich.	6.9	6.5	6.8	6.8	6.7	6.5	7.2	8.5	9.6	9.6	10.2	10.5	11.0	11.6	11.4	10.8	10.0	9.3	8.4	7.4	6.5	6.5	8.4		
Green Bay, Wis.	5.3	5.0	4.7	4.7	4.8	5.4	5.4	5.9	7.2	8.6	8.5	9.6	10.5	10.9	11.7	11.1	11.4	11.2	10.9	10.4	9.5	9.7	10.6		
Hannibal, Mo.	6.5	6.0	5.9	6.0	5.8	5.3	5.5	6.0	7.5	8.7	9.1	9.7	10.2	10.0	10.1	10.4	9.7	8.4	7.6	5.6	5.9	6.0	7.5		
Harrisburg, Pa.	4.1	3.9	3.7	3.7	3.6	4.0	4.7	5.4	6.2	7.2	7.7	8.2	8.8	8.9	8.7	9.6	9.5	9.0	7.2	5.4	4.9	4.1	6.2		
Hatteras, N. C.	11.5	12.3	11.9	11.6	12.1	12.4	12.5	13.1	13.5	14.1	14.7	15.0	15.8	16.0	15.4	15.1	14.5	14.4	14.0	13.3	12.1	11.6	11.8	13.5	
Havre, Mont.	8.4	8.4	7.9	8.3	8.1	8.3	7.6	8.9	8.9	9.0	11.5	11.5	12.5	14.1	13.4	13.3	13.2	12.5	12.9	13.6	12.0	10.5	9.4	8.4	
Helena, Mont.	6.9	6.9	6.8	7.7	7.3	6.4																			

TABLE VI.—Average wind movement, etc.—Continued.

Stations.	Average wind movement, etc.												Average wind movement, etc.												
	1 a. m.	2 a. m.	3 a. m.	4 a. m.	5 a. m.	6 a. m.	7 a. m.	8 a. m.	9 a. m.	10 a. m.	11 a. m.	Noon.	1 p. m.	2 p. m.	3 p. m.	4 p. m.	5 p. m.	6 p. m.	7 p. m.	8 p. m.	9 p. m.	10 p. m.	11 p. m.	Midnight.	Mean.
Palestine, Tex.....	5.6	4.9	4.8	4.3	4.1	4.3	4.0	4.2	5.4	6.6	7.0	7.0	7.1	7.3	7.3	7.2	6.8	6.1	6.5	5.7	5.2	4.9	5.3	5.4	5.7
Parkersburg, W. Va.....	3.6	3.0	2.8	2.7	2.8	3.2	3.3	3.9	4.5	5.6	5.5	6.2	6.8	6.7	7.1	6.7	6.4	5.6	4.6	3.7	4.2	4.1	3.7	4.7	4.7
Pensacola, Fla.....	6.2	5.8	5.9	5.5	5.2	5.6	6.0	5.9	6.6	6.8	7.6	8.3	9.7	10.8	11.9	12.9	12.3	11.8	11.1	10.0	8.5	7.4	6.7	6.2	8.1
Philadelphia, Pa.....	8.3	8.0	7.8	8.0	8.0	8.2	8.2	9.6	9.6	10.0	9.9	9.9	11.2	11.1	11.2	12.0	11.6	11.3	10.3	9.5	9.2	8.4	8.2	8.4	9.5
Phoenix, Ariz.....	3.6	3.4	3.4	3.2	3.2	3.2	3.2	3.4	2.9	3.2	3.4	3.9	4.3	5.0	5.5	6.4	5.7	4.5	4.0	4.6	4.0	4.0	4.0	4.0	4.1
Pierre, S. Dak.....	10.2	8.7	7.5	7.0	7.2	6.5	6.9	7.6	8.7	10.1	10.8	11.1	11.7	11.9	12.1	11.3	11.7	12.4	12.7	12.2	11.7	10.3	10.3	11.0	10.1
Pittsburg, Pa.....	4.2	4.2	3.7	3.7	3.8	4.1	4.4	4.9	5.8	6.5	6.6	6.7	7.0	7.4	7.7	7.4	7.3	7.2	6.7	6.3	6.1	5.0	4.8	4.8	5.7
Port Angeles, Wash.....	5.7	5.6	5.4	4.9	4.9	4.7	4.4	4.3	4.1	3.6	4.7	5.4	6.6	6.1	6.1	6.3	7.2	7.6	8.2	8.0	8.1	7.1	5.5	4.7	5.8
Port Huron, Mich.....	7.5	8.2	7.2	7.7	7.7	7.5	7.2	8.5	9.7	10.9	11.3	11.7	11.3	12.5	11.8	12.2	11.2	10.6	10.1	8.8	8.4	7.8	8.1	7.5	9.4
Portland, Me.....	5.3	5.2	5.8	5.8	5.7	5.7	6.1	6.6	7.8	8.3	8.5	8.6	9.0	9.5	9.6	8.6	8.8	8.1	6.8	5.9	5.4	5.1	5.0	5.2	6.9
Portland, Oreg.....	8.9	8.3	7.5	6.7	6.5	6.1	6.4	6.1	5.4	5.3	6.5	7.6	7.9	8.1	9.3	9.4	10.2	10.6	10.9	10.6	10.0	10.4	9.7	8.8	8.2
Pueblo, Colo.....	6.5	6.0	5.0	4.9	4.5	4.7	5.3	5.5	5.7	5.2	5.8	6.2	7.3	8.9	9.3	11.1	11.1	11.7	11.6	12.7	11.9	9.9	8.3	6.8	7.7
Raleigh, N. C.....	4.5	4.4	4.9	4.4	4.4	4.5	5.3	7.0	7.2	7.4	7.0	7.1	7.3	7.6	7.3	7.8	7.6	7.4	6.6	4.8	4.5	4.9	4.9	6.0	6.0
Rapid City, S. Dak.....	6.4	6.9	6.4	6.2	6.1	5.8	5.8	5.7	5.9	7.9	9.5	10.4	11.1	11.1	11.1	10.4	10.6	10.2	9.5	8.7	7.2	6.8	6.4	8.2	
Red Bluff, Cal.....	8.0	8.1	8.0	7.0	6.3	6.2	5.8	4.9	5.0	5.9	7.1	6.9	7.2	7.6	8.2	8.0	8.5	8.1	9.2	9.2	9.1	8.5	8.1	7.5	
Richmond, Va.....	4.8	4.5	4.5	4.6	5.4	5.0	5.6	6.6	7.3	7.4	7.1	7.0	7.7	8.4	7.9	8.1	8.4	7.9	6.7	5.6	5.3	5.1	4.8	4.9	6.1
Rochester, N. Y.....	6.1	5.8	5.9	6.2	6.4	6.6	7.1	7.7	8.9	9.2	10.1	10.3	10.7	11.3	10.8	10.7	10.2	9.5	8.4	6.9	5.9	6.3	6.1	8.0	
Roseburg, Oreg.....	2.6	2.5	2.2	1.8	1.6	1.9	1.9	1.6	2.1	2.5	2.8	3.4	4.2	5.1	5.3	6.2	6.8	7.0	7.5	7.8	7.2	5.3	3.8	4.0	
Sacramento, Cal.....	10.1	10.3	10.2	10.5	10.2	9.8	9.6	9.2	8.8	9.0	9.1	9.3	9.7	10.4	10.9	11.6	12.2	12.8	13.2	13.1	12.1	12.3	11.9	10.6	
St. Louis, Mo.....	6.7	6.5	6.3	5.9	6.2	5.9	6.2	7.1	7.6	8.7	9.4	9.8	10.6	10.5	10.2	9.6	9.4	8.5	7.3	6.3	6.2	6.0	6.7	7.7	
St. Paul, Minn.....	5.9	5.8	5.0	4.6	5.3	5.4	5.1	5.7	6.9	7.8	8.4	8.7	9.3	10.1	10.3	10.6	9.9	9.7	8.8	7.9	6.5	6.0	6.3	6.2	7.3
Salt Lake City, Utah.....	4.3	5.9	5.6	5.4	4.5	4.4	4.5	4.4	3.6	4.1	5.3	5.1	5.8	6.4	7.9	10.4	10.2	10.1	9.0	7.8	6.6	5.6	5.9	4.4	6.6
San Antonio, Tex.....	8.6	7.9	6.9	6.3	5.5	5.1	4.9	5.0	7.2	8.6	8.3	8.6	8.9	9.6	10.1	9.4	9.3	10.3	10.4	12.0	10.7	10.9	9.6	8.5	8.5
San Diego, Cal.....	3.3	3.1	3.1	3.3	3.3	3.1	3.1	3.2	3.5	3.4	4.1	5.3	6.8	8.4	9.5	10.0	10.3	9.9	9.3	8.5	7.9	6.3	5.1	3.9	5.7
Sandusky, Ohio.....	7.6	7.3	6.8	6.8	6.7	7.3	7.6	7.4	7.9	8.3	8.7	8.6	9.2	9.4	9.5	9.4	8.0	8.0	6.8	6.7	7.1	6.7	7.8	7.6	
San Francisco, Cal.....	11.4	10.9	9.3	9.0	8.6	8.5	7.4	7.2	7.5	7.4	8.2	9.0	9.9	12.0	15.0	18.1	19.9	20.6	21.4	21.2	21.1	20.0	17.0	13.6	13.1
San Luis Obispo, Cal.....	3.1	2.6	2.3	2.2	2.2	3.0	3.4	3.6	3.5	4.1	4.4	4.8	5.6	6.6	7.8	8.8	9.7	9.5	8.9	8.4	7.5	5.8	3.5	5.2	
Santa Fe, N. Mex.....	6.6	5.7	5.4	4.7	3.9	3.2	2.8	2.4	2.9	3.5	4.8	6.0	7.4	7.8	8.5	9.0	9.0	8.8	8.3	8.4	7.4	5.6	6.5	7.0	6.1
Sault Ste. Marie, Mich.....	4.1	4.0	4.4	5.1	4.6	4.9	6.1	6.9	7.6	9.4	10.6	11.8	12.6	13.4	13.7	13.5	12.2	10.1	7.8	7.3	6.3	5.0	4.1	8.3	
Savannah, Ga.....	5.6	5.6	5.5	4.9	4.7	4.8	5.6	6.5	6.7	6.7	6.8	8.0	9.0	11.1	11.0	9.9	8.7	8.7	8.0	7.5	7.2	5.6	7.5		
Seattle, Wash.....	4.5	4.3	3.9	4.0	3.5	3.3	3.6	3.3	3.0	3.7	4.2	5.0	5.5	6.2	6.3	6.8	6.7	7.0	6.6	6.9	6.6	6.2	5.0	4.4	5.0
Shreveport, La.....	5.2	5.5	5.2	4.5	4.4	4.0	4.4	4.4	5.4	5.4	5.9	6.4	7.1	7.6	7.1	7.4	7.1	7.4	6.0	5.0	5.1	5.9	6.1	5.8	
Sioux City, Iowa.....	9.8	9.2	9.8	9.9	9.3	9.2	8.9	8.8	9.9	11.2	12.3	13.5	14.8	14.2	14.1	15.2	14.6	14.3	13.3	11.6	11.2	11.3	11.5	11.1	11.6
Spokane, Wash.....	5.6	5.7	5.3	4.7	5.3	5.3	5.4	6.1	6.4	6.9	7.7	7.5	8.3	8.7	9.1	8.8	8.5	8.3	7.7	6.7	6.4	5.8	6.9	6.9	
Springfield, Ill.....	5.5	5.7	5.3	5.7	5.3	5.4	6.8	7.1	7.4	7.8	8.0	8.9	9.2	9.3	9.4	8.8	8.7	7.5	5.7	4.7	4.8	4.8	5.7	6.8	
Springfield, Mo.....	7.8	7.8	7.3	7.0	6.6	6.6	6.2	6.6	7.9	8.7	9.0	9.3	9.2	9.3	9.5	9.7	9.7	8.4	8.6	8.2	7.1	7.3	7.6	7.5	8.0
Tacoma, Wash.....	5.6	4.7	3.8	3.8	3.4	3.3	3.2	3.2	2.8	3.4	4.7	6.2	7.1	7.3	7.1	7.5	7.8	7.7	7.0	7.4	7.2	6.9	6.0	5.6	
Tampa, Fla.....	3.9	3.9	4.2	3.7	4.0	3.8	4.2	4.9	5.6	5.8	5.9	5.5	6.9	6.4	7.9	8.1	9.1	8.4	7.7	6.7	6.3	5.5	5.0	4.2	5.7
Tatoosh Island, Wash.....	8.9	10.0	10.3	10.2	9.7	9.5	9.4	8.8	9.6	9.1	9.9	10.0	9.9	10.9	10.5	10.2	10.8	10.4	10.0	10.6	11.3	11.7	10.7	10.2	
Toledo, Ohio.....	3.8	4.0	3.9	3.8	3.8	3.9	4.2	4.0	5.2	5.7	6.3	6.8	7.6	7.5	7.3	7.2	6.8	6.8	5.7	4.3	3.6	3.8	4.0	4.0	5.2
Vicksburg, Miss.....	5.0	4.7	4.7	4.7	4.5	4.2	4.6	4.4	4.8	4.9	5.9	5.8	6.2	6.4	6.4	6.5	6.3	6.1	6.4	5.8	5.5	5.2	5.1	5.4	
Vineyard Haven, Mass.....	7.8	7.9	8.2	8.5	8.8	8.8	9.0	9.9	10.7	10.6	11.0	10.9	11.7	11.4	11.7	11.4	10.9	10.2	9.2	8.4	7.8	8.1	8.2	8.0	9.5
Walla Walla, Wash.....	5.4	5.1	5.2	5.0	5.6	5.3	5.0	5.1	4.5	4.9	5.8	6.0	6.1	6.2	6.0	5.9	6.2	5.7	6.1	6.7	6.2	5.6	5.1	5.2	5.6
Washington, D. C.....	3.4	3.6	3.5	3.5	3.7	3.4	4.0	5.0	6.3	7.1	7.4	7.7	8.2	8.2	8.3	8.8	8.4	7.9	6.7	4.6	4.4	4.0	3.8	3.5	5.6
Wichita, Kans.....	6.2	6.0	5.9	5.7	5.5	5.8	5.9	5.7	6.4	7.0	7.6	8.2	8.1	8.5	9.1	9.4	9.3	9.3	8.2	6.8	6.5	6.4	6.7	6.5	7.1
Williston, N. Dak.....	7.9	7.9	7.4	7.7	7.5	7.1	7.7	9.2	11.1	10.9	10.9	11.7	11.5	11.0	12.0	11.5	10.9	11.1	11.1	10.5	9.0	8.0	8.8	9.6	
Wilmington, N. C.....	6.0	6.5	6.2	5.6	5.6	5.5	6.9	7.9	8.4	8.1	7.8	8.1	8.6	10.5	10.9	11.7	12.1	11.5	9.6	8.4	7.8	7.0	7.0	6.6	8.1
Winnemucca, Nev.....	9.1	9.9	10.3	9.6	9.8	10.0	9.3	9.1	8.8	7.8	8.6	8.2	8.9	9.7	11.2	12.0	12.3								

TABLE VII.—Resultant winds from observations at 8 a. m. and 8 p. m., daily, during the month of June, 1898.

Stations.	Component direction from—				Resultant.		Stations.	Component direction from—				Resultant.											
	N.	S.	E.	W.	Direction from—	Duration.		N.	S.	E.	W.	Direction from—	Duration.										
<i>New England.</i>																							
Eastport, Me.	17	24	14	17	s. 23 w.	8	Upper Lake Region—Cont'd.	Hours.	Hours.	Hours.	Hours.	o	Hours.										
Portland, Me.	16	24	17	15	s. 14 e.	8	Green Bay, Wis.	19	21	18	13	s. 68 e.	5										
Northfield, Vt.	25	27	5	13	s. 76 w.	8	Duluth, Minn.	38	3	29	8	n. 31 e.	41										
Boston, Mass.	20	13	17	24	n. 45 w.	10	Moorhead, Minn.	22	21	19	17	n. 63 e.	2										
Nantucket, Mass.	13	21	13	25	s. 56 w.	14	Bismarck, N. Dak.	21	14	19	21	n. 16 w.	7										
Woods Hole, Mass.*	7	16	7	7	s. 37 w.	9	Williston, N. Dak.	26	12	17	15	n. 8 e.	14										
Block Island, R. I.	14	23	18	24	s. 31 w.	6	<i>Upper Mississippi Valley.</i>																
New Haven, Conn.	18	23	13	16	St. Paul, Minn.													12	22	16	25	s. 42 w.	14
<i>Middle Atlantic States.</i>														La Crosse, Wis. †.	7	16	7	10	s. 18 w.	10			
Albany, N. Y.	20	24	12	12	s. 4	3	Davenport, Iowa	13	16	18	26	s. 60 w.	8										
Binghamton, N. Y. †	8	6	11	9	s. 45 e.	3	Des Moines, Iowa	13	28	15	17	s. 8 w.	15										
New York, N. Y.	16	23	12	22	s. 55 w.	12	Dubuque, Iowa	13	24	16	19	s. 15 w.	11										
Harrisburg, Pa. †	8	6	6	14	s. 76 w.	8	Keokuk, Iowa	18	23	18	16	s. 22 e.	5										
Philadelphia, Pa.	16	23	14	25	s. 58 w.	13	Cairo, Ill.	18	27	20	11	s. 45 e.	13										
Atlantic City, N. J.	17	16	22	20	n. 63 e.	2	Springfield, Ill.	15	27	16	18	s. 9 w.	12										
Cape May, N. J.	17	17	19	17	e.	2	Hannibal Mo. †	4	13	9	9	s. 9	9										
Baltimore, Md.	19	18	22	13	n. 84 e.	9	St. Louis, Mo.	18	21	26	12	s. 78 e.	14										
Washington, D. C.	16	21	18	18	s. 5	2	<i>Missouri Valley.</i>																
Lynchburg, Va.	20	19	20	18	n. 63 e.	2	Columbia, Mo.*	6	14	11	6	s. 32 e.	9										
Norfolk, Va.	16	20	25	14	s. 70 e.	12	Kansas City, Mo.	15	28	27	5	s. 60 e.	26										
Richmond, Va.	21	23	15	15	s.	2	Springfield, Mo.	10	35	27	4	s. 43 e.	34										
<i>South Atlantic States.</i>														Lincoln, Nebr.	16	28	20	4	s. 53 e.	20			
Charlotte, N. C.	13	20	29	10	s. 70 e.	20	Omaha, Nebr.	20	25	18	9	s. 61 e.	10										
Batterea, N. C.	24	26	11	8	s. 56 e.	4	Pierre, S. Dak.	13	10	11	5	n. 63 e.	7										
Raleigh, N. C.	23	19	14	13	n. 45 w.	7	Huron, S. Dak.	15	23	24	16	s. 45 e.	11										
Wilmington, N. C.	11	26	9	30	s. 55 w.	26	Yankton, S. Dak. †	9	8	10	12	n. 63 w.	2										
Charleston, S. C.	8	32	12	18	s. 14 w.	25	<i>Northern Slope.</i>																
Augusta, Ga.	11	25	19	18	s. 4 e.	14	Havre, Mont.	13	15	20	26	s. 72 w.	6										
Savannah, Ga.	6	33	13	17	s. 8 w.	27	Miles City, Mont.	34	6	13	26	n. 30 w.	32										
Jacksonville, Fla.	12	29	22	17	s. 17 e.	17	Helena, Mont.	9	21	8	35	s. 66 w.	30										
<i>Florida Peninsula.</i>														Rapid City, S. Dak.	16	13	20	4	n. 45 w.	4			
Jupiter, Fla.	12	28	21	5	s. 45 e.	23	Cheyenne, Wyo.	11	25	7	23	s. 49 w.	21										
Key West, Fla.	5	14	51	0	s. 81 e.	52	Lander, Wyo.	16	17	9	30	s. 88 w.	27										
Tampa, Fla.	17	16	32	10	n. 87 e.	22	North Platte, Nebr.	13	26	16	13	s. 13 e.	3										
<i>Eastern Gulf States.</i>														<i>Middle Slope.</i>									
Atlanta, Ga.	14	22	12	28	s. 63 w.	18	Denver, Colo.	11	29	15	19	s. 13 w.	18										
Pensacola, Fla.	9	33	8	30	s. 42 w.	33	Pueblo, Colo.	21	14	15	20	n. 36 w.	9										
Mobile, Ala.	18	23	9	24	s. 72 w.	16	Concordia, Kans.	16	31	16	6	s. 34 e.	18										
Montgomery, Ala.	4	34	11	25	s. 25 w.	33	Dodge, Kans.	14	32	18	9	s. 27 e.	20										
Vicksburg, Miss.	5	25	20	22	s. 6 w.	20	Wichita, Kans.	13	35	20	8	s. 29 e.	25										
New Orleans, La.	6	39	14	17	s. 5 w.	33	Oklahoma, Okla.	8	38	20	3	s. 30 e.	34										
<i>Western Gulf States.</i>														<i>Southern Slope.</i>									
Shreveport, La.	8	35	28	16	s. 21 e.	34	Abilene, Tex.	4	41	10	11	s. 2 w.	37										
Fort Smith, Ark.	13	13	35	6	e.	29	Amarillo, Tex.	10	33	19	8	s. 26 e.	26										
Little Rock, Ark.	8	30	15	15	s.	22	<i>Southern Plateau.</i>																
Corpus Christi, Tex.	1	39	33	1	s. 45 e.	53	El Paso, Tex.	19	8	33	13	n. 61 e.	23										
Galveston, Tex.	3	47	15	9	s. 8 e.	44	Santa Fe, N. Mex.	9	27	18	17	s. 3 e.	18										
Palestine, Tex.	9	41	17	6	s. 19 e.	34	Phenix, Ariz.	22	5	20	24	n. 13 w.	18										
San Antonio, Tex.	7	31	38	2	s. 56 e.	43	Yuma, Ariz.	11	23	13	23	s. 40 w.	16										
<i>Ohio Valley and Tennessee.</i>														Independence, Cal.	19	17	16	25	n. 77 w.	9			
Chattanooga, Tenn.	12	28	15	23	s. 27 w.	18	<i>Middle Plateau.</i>																
Knoxville, Tenn.	26	17	17	13	n. 24 e.	10	Carson City, Nev.	7	19	4	40	s. 72 w.	38										
Memphis, Tenn.	11	23	14	22	s. 25 w.	19	Winnemucca, Nev.	15	28	7	23	m. 51 w.	21										
Nashville, Tenn.	20	17	15	23	n. 69 w.	8	Salt Lake City, Utah.	16	20	24	17	s. 60 e.	8										
Lexington, Ky.	13	22	24	16	s. 42 w.	12	<i>Northern Plateau.</i>																
Louisville, Ky.	25	21	12	17	n. 51 w.	6	Baker City, Oreg.	22	26	3	16	s. 77 w.	13										
Evansville, Ind. †	11	11	6	6	e.	5	Idaho Falls, Idaho.	23	32	3	7	s. 24 w.	10										
Indianapolis, Ind.	24	22	15	16	n. 27 w.	2	Spokane, Wash.	15	25	18	13	s. 27 e.	11										
Cincinnati, Ohio	16	23	21	14	s. 45 e.	10	Walla Walla, Wash.	14	26	11	16	s. 23 w.	13										
Columbus, Ohio	17	15	16	25	n. 77 w.	9	<i>North Pacific Coast Region.</i>																
Pittsburg, Pa.	21	19	7	24	s. 83 w.	17	Fort Canby, Wash.	23	20	11	18	n. 67 w.	8										
Parkersburg, W. Va.	19	27	13	14	s. 7 w.	8	Port Angeles, Wash. *	12	0	7	18	n. 43 w.	16										
<i>Lower Lake Region.</i>														Seattle, Wash.	16	23	15	17	s. 16 w.	7			
Buffalo, N. Y.	12	19	14	30	s. 66 w.	18	Tacoma, Wash.	24	17	5	26	n. 72 w.	22										
Oswego, N. Y. †	15	19	12	24	s. 72 w.	13	Tatoosh Island, Wash.	6	26	13	24	s. 29 w.	23										
Rochester, N. Y.	19	15	15	29	s. 74 w.	15	Portland, Oreg.	20	20	9	26	w.	17										
Erie, Pa.	13	19	14	24	s. 59 w.	12	Roseburg, Oreg.	36	5	13	21	n. 14 w.	32										
Cleveland, Ohio.	18	24	15	18	s. 27 w.	7	<i>Middle Pacific Coast Region.</i>																
Sandusky, Ohio.	12	15	21	26	s. 59 w.	6	Eureka, Cal.	23	16	12	31	n. 70 w.	20										
Toledo, Ohio.	14	14	17	29	w.	11	Red Bluff, Cal.	22	23	2	10	s. 85 e.	12										
Detroit, Mich.	16	23	14	22	s. 49 w.	11	Sacramento, Cal.	8	39	9	23	s. 24 w.	34										
<i>Upper Lake Region.</i>														San Francisco, Cal.	1	20	1	50	s. 69 w.	53			
Alpena, Mich.	18	20	19	18	s. 27 e.	2	<i>South Pacific Coast Region.</i>																
Grand Haven, Mich.	15	21	14	24	s. 59 w.	12	Fresno, Cal.	41	2	0	38	n. 44 w.	54										
Marquette, Mich.	23	17	11	23	n. 63 w.	13	Los Angeles, Cal.	3	18	2	45	s. 69 w.	46										
Port Huron, Mich.	25	23	10	12	n. 45 w.	3	San Diego, Cal.	17	20	4	29	s. 88 w.	25										
Sault Ste. Marie, Mich.	13	8	22	26	n. 39 w.	6	San Luis Obispo, Cal.	18	9	1	36	n. 76 w.	36										
Chicago, Ill.	17	22	18	16	s. 22 e.	5																	
Milwaukee, Wis.	19	19	19	17	e.	2																	

* From observations at 8 p. m. only.

† From observations at 8 a. m. only.

TABLE VIII.—*Thunderstorms and auroras, June, 1898.*

States.	No. of stations.																															Total.				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
Alabama.....	55	T.	2	6	3	1	1	...	4	10	5	6	4	3	6	5	6	6	7	2	1	3	3	8	5	4	3	2	...	106	25	T.				
		A.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A.			
Arizona.....	56	T.	3	4	9	9	4	1	1	3	4	5	10	2	1	62	15	T.	
		A.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A.		
Arkansas.....	59	T.	9	3	9	9	6	3	7	9	1	4	9	11	11	9	10	7	5	3	10	11	15	6	6	3	6	5	5	1	1	194	0	T.		
		A.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A.		
California.....	180	T.	3	...	...	...	2	4	5	4	4	4	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	27	8	T.
		A.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A.		
Colorado.....	72	T.	...	...	4	1	6	8	11	8	6	7	15	11	20	19	10	5	15	13	15	6	2	13	2	...	2	...	1	3	9	212	25	T.
		A.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A.		
Connecticut.....	21	T.	...	...	...	...	4	...	...	3	3	8	7	...	...	...	...	...	...	...	10	...	...	...	...	6	...	...	...	...	41	7	T.	
		A.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A.		
Delaware.....	5	T.	...	1	...	...	...	...	...	...	2	1	3	...	...	...	...	1	...	...	3	1	...	...	1	1	1	3	...	17	10	T.		
		A.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A.		
Dist. of Columbia	4	T.	...	1	1	...	1	A.
		A.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A.		
Florida.....	45	T.	4	1	2	8	...	...	1	7	8	11	8	5	8	13	10	6	12	14	8	5	5	7	10	9	7	2	2	173	25	T.		
		A.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A.		
Georgia.....	55	T.	2	1	2	...	...	...	1	2	14	8	4	6	8	8	11	10	6	8	2	...	2	11	6	3	4	...	119	21	T.			
		A.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A.		
Idaho.....	38	T.	3	1	1	2	5	6	3	3	4	8	7	4	8	3	1	...	3	2	...	2	1	3	1	...	1	...	72	22	T.					
		A.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A.		
Illinois.....	86	T.	13	...	...	...	4	27	15	29	23	24	16	10	8	7	10	2	3	1	...	5	20	5	17	15	3	1	...	258	22	T.		
		A.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A.		
Indiana.....	57	T.	...	...	...	...	...	...	12	9	8	9	10	11	9	5	1	1	1	...	1	...	2	1	11	9	1	...	101	17	T.			
		A.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A.		
Indian Territory.....	7	T.	1	1	2	1	2	1	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	18	14	T.				
		A.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A.		
Iowa.....	120	T.	2	5	12	7	8	8	2	17	8	3	10	7	2	1	2	9	14	...	4	14	2	15	12	3	5	9	0	190	26	T.				
		A.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A.		
Kansas.....	85	T.	3	4	6	5	11	3	7	8	1	12	5	1	11	11	1	12	4	9	3	1	6	7	...	...	...	...	...	...	...	131	22	T.
		A.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A.		
Kentucky.....	48	T.	...	...	1	1	6	9	9	5	10	3	5	3	6	6	5	8	...	2	9	14	12	3	...	...	...	...	...	...	...	117	19	T.
		A.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A.		
Louisiana.....	46	T.	8	7	7	7	5	7	5	1	1	5	5	4	6	12	11	9	6	7	3	6	5	10	4	6	2	10	10	8	6	194	30	T.		
		A.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A.		
Maine.....	18	T.	8	1	14	4	T.	
		A.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A.		
Maryland.....	40	T.	2	3	...	...	...	...	1	12	5	10	1	...	...	...	...	1	1	1	2	...	9	3	3	7	1	...	1	...	61	15	T.	
		A.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A.		
Massachusetts.....	59	T.	1	...	1	...	...	...	...	...	2	4	1	...	...	1	2	...	7	...	9	...	1	...	...	1	...	...	...	...	29	10	T.	
		A.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A.		
Michigan.....	104	T.	10	2	1	1	1	1	1	8	1	1	10	16	19	14	3	1	3	6	3	...	18	17	1	12	3	...	1	...	152	23	T.			
		A.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A.		
Minnesota.....	67	T.	7	4	9	11	13	3	1	...	1	5	1	5	5	1	1	1	1	1	2	...	1	2	2	11	11	...	20	4	23	4	4	A.		
		A.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A.		
Mississippi.....	43	T.	10	7	6	5	7	6	12	1	1	2	10	9	14	9	7	9	11	6	8	11	8	9	4	3	4	11	10	4	10	234	30	T.		
		A.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A.		
Missouri.....	95	T.	20	2	15	20	11	11	20	24	20	12	24	17	4	23	17	12	6	16	2	2	9	9	1	6	20	34	8	...	367	28	T.			
		A.	0	0	0	0	0</td																													

TABLE IX.—Average hourly sunshine (in percentages), June, 1898.

Stations.	Instrument.	Percentages for each hour of local mean time ending with the respective hour.																Hours of sunshine.			
		A. M.								P. M.								Total.			
		5	6	7	8	9	10	11	Noon	1	2	3	4	5	6	7	8	Actual.	Possible.	Percent of possible.	
		5	6	7	8	9	10	11	Noon	1	2	3	4	5	6	7	8	Hours.	Hours.	Personal estimate.	
Albany, N. Y.	T.	66	73	84	91	99	100	99	99	98	97	95	96	94	83	73	63	410.7	459.9	89	46
Atlanta, Ga.	T.	72	72	77	88	96	100	97	92	94	92	86	79	72	73	59	41	363.0	431.5	84	57
Atlantic City, N. J.	P.	60	61	63	68	73	72	75	81	85	78	77	72	65	56	53	312.8	445.9	70	56	
Baltimore, Md.	T.	50	57	69	83	91	93	97	100	98	100	96	93	85	86	59	49	374.6	445.9	84	62
Binghamton, N. Y.	T.	23	23	34	59	62	72	81	79	79	75	66	61	42	31	30	248.0	456.2	54	40	
Bismarck, N. Dak.	P.	40	41	44	57	62	62	67	69	66	63	68	67	55	48	52	50	271.8	475.6	57	53
Boston, Mass.	T.	20	30	38	42	50	55	57	65	65	75	68	63	51	46	46	24	238.5	456.2	51	40
Buffalo, N. Y.	T.	36	43	57	74	81	87	89	93	89	91	88	86	80	67	46	35	333.7	459.9	73	44
Charleston, S. C.	T.	43	48	57	63	80	83	88	90	86	89	78	76	64	47	40	37	297.1	428.7	69	65
Chattanooga, Tenn.	T.	49	50	55	67	72	78	73	81	81	78	75	72	69	57	30	32	287.1	431.3	66	59
Cheyenne, Wyo.	P.	70	73	85	88	90	88	86	85	79	73	65	65	64	58	39	35	325.5	451.9	72	63
Chicago, Ill.	T.	16	18	25	46	57	69	73	72	70	70	62	59	56	30	24	33	229.0	456.2	50	56
Cincinnati, Ohio	T.	66	65	65	68	82	89	90	93	96	97	95	93	90	79	64	59	366.3	445.9	82	65
Cleveland, Ohio	T.	46	47	60	74	77	85	89	84	87	84	85	82	70	51	46	43	322.1	456.2	71	76
Columbia, Mo.	T.	46	47	56	71	79	86	90	87	90	88	89	90	83	74	67	49	341.2	445.9	77	44
Columbus, Ohio	T.	50	56	72	89	90	90	96	97	96	96	99	97	92	95	75	62	387.1	449.0	86	63
Denver, Colo.	P.	77	71	80	81	89	85	84	84	73	67	59	51	41	46	33	47	302.8	449.0	67	56
Des Moines, Iowa	T.	50	49	50	57	57	75	72	72	68	69	70	67	73	72	62	58	296.2	456.2	68	62
Detroit, Mich.	T.	50	51	64	77	82	85	86	86	86	81	75	75	68	57	32	21	312.1	456.2	68	60
Dodge, Kans.	P.	49	54	67	71	75	77	71	71	71	72	69	70	63	54	52	302.3	443.1	68	60	
Dubuque, Iowa	T.	23	23	31	44	58	69	79	73	83	75	75	73	67	56	36	30	263.9	456.2	58	45
Eastport, Me.	P.	24	23	23	26	39	44	50	44	52	63	57	63	60	56	42	30	204.6	466.7	44	30
Erie, Pa.	T.	46	47	51	69	76	81	82	82	87	87	85	85	73	52	43	40	313.3	456.2	69	54
Eureka, Cal.	T.	26	28	31	44	51	55	55	47	50	57	63	61	58	52	47	48	219.2	451.9	49	44
Fresno, Cal.	T.	90	90	91	96	97	98	98	99	99	100	99	96	90	87	37	37	417.5	440.2	95	88
Galveston, Tex.	P.	30	81	77	84	84	87	92	81	80	73	80	88	83	83	25	8	301.1	419.0	72	52
Helena, Mont.	P.	47	49	62	69	69	73	71	72	68	69	78	58	45	41	33	33	283.0	475.6	60	57
Huron, S. Dak.	T.	50	50	47	50	63	73	70	72	80	74	73	61	54	52	57	57	285.4	463.5	62	52
Indianapolis, Ind.	T.	40	40	39	58	73	75	78	82	77	71	72	66	50	48	43	43	275.3	449.0	61	50
Jacksonville, Fla.	T.	33	40	42	72	94	95	100	96	93	86	83	73	57	40	36	50	303.0	429.9	72	56
Kansas City, Mo.	P.	36	46	55	54	62	63	59	60	70	74	70	58	52	38	45	250.3	445.9	56	45	
Key West, Fla.	T.	34	38	66	74	81	91	89	88	88	87	84	79	60	54	31	31	301.1	410.2	71	61
Knoxville, Tenn.	T.	54	57	62	76	89	96	95	93	93	97	92	89	83	81	73	67	345.4	437.2	82	82
Little Rock, Ark.	T.	46	49	48	57	69	82	78	70	73	78	74	69	56	41	37	39	270.7	434.3	82	83
Los Angeles, Cal.	P.	29	23	22	26	42	61	57	86	91	91	91	91	93	84	80	78	208.7	481.5	68	61
Louisville, Ky.	T.	53	53	57	76	82	83	88	89	95	90	86	82	71	65	56	52	338.8	443.1	75	55
Minneapolis, Minn.	T.	20	21	32	48	82	85	88	98	99	92	86	84	61	54	38	31	252.6	466.7	54	54
Nashville, Tenn.	T.	55	62	72	85	88	98	99	95	98	97	95	95	90	88	85	87	369.1	437.2	84	62
New Orleans, La.	T.	50	43	52	73	79	84	75	70	58	53	50	52	37	27	17	12	232.6	420.9	55	44
New York, N. Y.	T.	26	32	54	64	81	86	92	96	91	93	88	81	73	60	31	32	315.0	451.9	70	54
Northfield, Vt.	P.	30	35	46	49	52	50	52	60	57	57	60	49	53	43	39	32	218.8	469.5	47	35
Oklahoma, Okla.	T.	46	46	55	77	90	97	93	93	97	95	96	95	96	86	73	67	358.8	434.3	72	59
Omaha, Nebr.	P.	36	39	54	56	60	65	68	64	56	59	62	66	64	57	58	58	266.1	451.9	59	56
Parkersburg, W. Va.	T.	38	37	38	50	63	70	81	84	88	80	74	73	48	38	38	38	281.6	445.9	63	57
Philadelphia, Pa.	T.	42	42	48	71	78	81	90	94	98	96	91	78	72	54	43	41	322.6	449.0	72	47
Phoenix, Ariz.	T.	77	78	88	94	92	91	92	93	94	92	92	85	79	72	48	48	382.2	428.7	89	82
Pittsburg, Pa.	T.	46	47	51	67	79	90	93	90	90	86	85	78	63	56	57	52	332.0	451.9	73	43
Portland, Me.	T.	17	27	43	49	65	72	78	71	77	79	71	71	58	45	32	14	265.6	463.5	57	34
Portland, Oreg.	T.	36	38	45	51	65	80	82	80	91	86	85	81	76	61	45	39	309.1	471.7	66	66
Raleigh, N. C.	T.	56	57	64	75	80	85	86	89	84	86	86	78	66	50	31	28	310.1	437.2	71	59
Rochester, N. Y.	T.	30	32	36	38	57	64	67	67	67	65	67	60	46	38	30	13	229.4	459.9	50	46
St. Louis, Mo.	T.	33	34	53	79	91	90	91	90	88	88	86	87	83	69	46	38	331.1	445.9	74	46
St. Paul, Minn.	P.	28	29	39	48	60	64	65	67	64	66	62	65	61	51	40	38	249.7	466.7	54	45
Salt Lake City, Utah.	P.	83	85	89	88	90	87	89	89	85	90	86	87	80	71	64	66	382.8	451.9	85	66
San Diego, Cal.	P.	21	20	22	26	31	51	76	87	87	84	86	80	70	59	40	33	248.4	429.7	58	72
San Francisco, Cal.	T.	22	32	47	68	77	81	87	94	95	95	94	92	83	70	54	45	328.3	443.1	74	63
Santa Fe, N. Mex.	P.	76	77	76	83	85	87	86	81	77	75	75	70	65	59	56	41	305.5	437.2	70	59
Savannah, Ga.	T.	67	43	78	87	88	90	92	89	88	84	84	80	73	66	52	41	333.4	425.8	78	61
Seattle, Wash.	T.	30	31	31	41	60	60	69	74	76	58	63	52	38	19	17	14	173.4	425.8	41	40
Spokane, Wash.	T.	63	68	68	79	88	91	92	93	92	93	91	87	84	75	67	59	387.3	479.8	81	55
Tacoma, Wash.	T.	27	27	36	47	61	69	75	71	73	76										

TABLE X.—Accumulated amounts of precipitation for each 5 minutes, for storms in which the rate of fall equaled or exceeded 0.25 in any 5 minutes, or 0.75 in 1 hour during June, 1898, at all stations furnished with self-registering gauges.

Stations.	Date.	Total duration.		Total amt. of precipi- tation.	Excessive rate.		Amount be- fore exces- sive began.	Depths of precipitation (in inches) during periods of time as indicated.												
		From—	To—		Began—	Ended—		5 min.	10 min.	15 min.	20 min.	25 min.	30 min.	35 min.	40 min.	45 min.	50 min.	60 min.	80 min.	100 min.
Albany, N. Y.	1	4.13 p.m.	6.15 p.m.	4	5	6	0.00	0.25	0.59	0.82	0.97	1.05	.....	.....	.....	.....	.....	.....	.....	.....
Atlanta, Ga.	13	.....	.....	0.20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.12	.....	.....
Atlantic City, N. J.	12	5.50 p.m.	D. N.	1.50	12.52 a.m.	1.25 a.m.	0.70	0.15	0.49	0.57	0.66	0.80	0.86	.....	.....	.....	.....	.....	0.45	.....
Baltimore, Md.	13	.....	.....	0.50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.28	.....	.....
Binghamton, N. Y.	11	.....	.....	0.43	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.40	.....	.....
Bismarck, N. Dak.	21	.....	.....	0.45	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.33	.....	.....
Boston, Mass.	19	.....	.....	0.56	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.48	.....	.....
Buffalo, N. Y.	20	.....	.....	0.60	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.29	.....	.....
Cairo, Ill.	26-27	.....	.....	0.75	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.54	.....	.....
Charleston, S. C.	21-22	8.17 p.m.	1.20 a.m.	1.17	8.22 p.m.	T.	0.10	0.28	0.52	0.70	0.82	0.92	.....	.....	.....	.....	.....	0.48	.....	.....
Chicago, Ill.*	25	.....	.....	2.50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.29	.....	.....
Cincinnati, Ohio	27	.....	.....	0.29	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.17	.....	.....
Cleveland, Ohio	25	.....	.....	0.57	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.19	.....	.....
Columbia, Mo.	7	5.27 p.m.	6.25 p.m.	1.00	5.28 p.m.	6.11 p.m.	T.	0.27	0.46	0.61	0.64	0.74	0.83	0.92	0.98	1.00	1.43	1.45	1.47	.....
Do.	14-15	8.25 p.m.	9.10 a.m.	9.86	9.18 p.m.	10.00 p.m.	0.03	0.14	0.52	0.81	0.94	1.05	1.21	1.37	1.41	1.43	1.45	1.47	1.47	.....
Do.	26	9.53 a.m.	1.25 p.m.	1.28	10.12 a.m.	10.24 a.m.	0.03	0.30	0.72	0.78	0.79	0.82	0.84	0.90	1.10	1.15	1.20	1.20	1.20	1.20
Columbus, Ohio	8	.....	.....	0.48	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.46	.....	.....	0.19	.....	.....
Denver, Colo.	3	.....	.....	0.19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.17	.....	.....
Des Moines, Iowa	12	5.02 p.m.	5.37 p.m.	0.66	5.02 p.m.	5.35 p.m.	0.00	0.10	0.16	0.26	0.44	0.55	0.65	.....	.....	.....	.....	0.29	.....	.....
Detroit, Mich.	10	7.00 p.m.	11.30 p.m.	1.30	8.01 p.m.	8.45 p.m.	0.05	0.45	0.65	0.70	0.75	0.78	0.80	0.90	1.00	1.05	1.15	1.20	1.20	1.20
Dodge, Kans.	13	1.50 p.m.	4.00 p.m.	1.53	2.24 p.m.	3.06 p.m.	0.35	0.25	0.50	0.63	0.75	0.81	0.84	0.90	1.10	1.15	1.20	1.20	1.20	1.20
Duluth, Minn.	2-3	8.47 p.m.	9.12 p.m.	1.24	8.47 p.m.	9.12 p.m.	0.00	0.47	0.76	1.00	1.15	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24
Eastport, Me.	8	.....	.....	0.95	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.60	.....	.....
Erie, Pa.	13	.....	.....	0.53	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.48	.....	.....
Fresno, Cal.†	.....	.....	.....	0.93	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.33	.....	.....	0.29	.....	.....
Galveston, Tex.	30	.....	.....	0.93	.....	.....	.....	5.00 a.m.	0.18	0.26	0.46	0.53	0.56	0.58	0.61	0.65	0.68	.....	.....	.....
Hannibal, Mo.	14-15	8.20 p.m.	7.15 a.m.	0.96	4.25 a.m.	4.50 a.m.	0.18	0.26	0.46	0.53	0.56	0.58	0.61	0.65	0.68	.....	.....	.....	.....	.....
Do.	18	4.30 p.m.	5.05 p.m.	0.81	4.35 p.m.	T.	0.30	0.56	0.71	0.79	0.81	0.84	0.86	0.88	0.90	0.92	0.94	0.96	0.98	0.98
Harrisburg, Pa.	2	.....	.....	0.42	.....	.....	.....	.....	0.41	.....	.....	.....	.....	.....	.....	.....	.....	0.06	.....	.....
Hatteras, N. C.	21	.....	.....	0.35	.....	.....	.....	.....	0.35	.....	.....	.....	.....	.....	.....	.....	0.31	.....	.....	.....
Huron, S. Dak.	30	.....	.....	0.31	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.29	.....	.....	.....
Idaho Falls, Idaho*	.....	.....	.....	0.31	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.29	.....	.....	.....
Indianapolis, Ind.	13	.....	.....	0.74	6.18 p.m.	6.30 p.m.	0.00	0.30	0.60	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Jacksonville, Fla.	17	6.18 p.m.	6.45 p.m.	0.74	6.18 p.m.	6.30 p.m.	0.00	0.30	0.60	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Jupiter, Fla.	11	.....	.....	0.06	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.06	.....	.....
Kansas City, Mo.	15-16	9.53 p.m.	D. N.	1.08	10.15 p.m.	10.35 p.m.	0.13	0.06	0.31	0.56	0.64	0.74	0.83	0.92	0.98	0.98	0.98	0.98	0.98	0.98
Key West, Fla.	10	4.55 p.m.	7.25 p.m.	1.30	4.55 p.m.	5.55 p.m.	0.00	0.19	0.24	0.32	0.40	0.50	0.60	0.66	0.69	0.76	0.79	0.95	0.95	0.95
Knoxville, Tenn.	26	9.40 a.m.	1.45 p.m.	1.22	9.45 a.m.	10.05 a.m.	0.03	0.22	0.52	0.78	0.86	0.94	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Lincoln, Nebr.	9	.....	.....	0.54	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.54	.....	.....	0.65	.....	.....
Little Rock, Ark.	1	7.09 p.m.	8.52 p.m.	1.63	7.50 p.m.	8.40 p.m.	0.03	0.12	0.24	0.43	0.71	0.86	1.12	1.34	1.49	1.54	1.60	1.62	1.62	1.62
Los Angeles, Cal.	10	.....	.....	T.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.65	.....	.....
Louisville, Ky.	26	2.15 a.m.	8.30 a.m.	1.96	4.15 a.m.	5.00 a.m.	0.71	0.12	0.15	0.23	0.45	0.66	0.76	0.79	0.82	0.89	0.92	0.93	0.93	0.93
Memphis, Tenn.	21	11.00 a.m.	11.25 a.m.	0.57	11.00 a.m.	11.15 a.m.	0.00	0.15	0.38	0.55	0.60	0.66	0.69	0.76	0.82	0.89	0.92	0.95	0.95	0.95
Milwaukee, Wis.	13	.....	.....	0.69	.....	.....	.....	.....	.....	.....	.....	.....	0.21	.....	.....	.....	.....	0.65	.....	.....
Montgomery, Ala.	13	.....	.....	0.21	.....	.....	.....	.....	.....	.....	.....	.....	0.21	.....	.....	.....	.....	0.15	.....	.....
Nantucket, Mass.	29	.....	.....	0.40	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.34	.....	.....
Nashville, Tenn.	15	6.30 p.m.	8.45 p.m.	1.99	6.38 p.m.	7.20 p.m.	T.	0.33	0.79	1.04	1.34	1.54	1.72	1.79	1.84	1.87	1.90	1.92	1.92	1.92
New Orleans, La.	28	2.45 p.m.	6.30 p.m.	1.14	2.52 p.m.	3.15 p.m.	0.01	0.17	0.47	0.69	0.79	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
New York, N. Y.	22	.....	.....	0.24	.....	.....	.....	.....	.....	.....	.....	.....	0.24	.....	.....	.....	0.34	.....	.....	.....
Norfolk, Va.	17	.....	.....	1.54	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.59	.....	.....
Northfield, Vt.	19	.....	.....	0.33	.....	.....	.....	.....	.....	.....	.....	.....	0.37	.....	.....	.....	0.23	.....	.....	.....
Oklahoma, Okla.	8	.....	.....	0.53	.....	.....	.....	.....	.....	.....	.....	.....	0.37	.....	.....	.....	0.23	.....	.....	.....
Omaha, Nebr.	9	12.55 p.m.	5.13 p.m.	1.34	3.38 p.m.	4.00 p.m.	0.04	0.15	0.31	0.58	0.93	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Parkersburg, W. Va.	27	4.40 p.m.	D. N.	2.75	4.58 p.m.	5.50 p.m.	0.24	0.10	0.15	0.24	0.28	0.39	0.44	0.52	0.63	0.89	1.04	1.14	1.14	1.14
Philadelphia, Pa.	28	.....	.....	0.59	.....	.....	.....	.....	0.57	.....	.....	.....	0.57	.....	.....	.....	0.68	.....	.....	.....
Pittsburg, Pa.	13	5.05 p.m.	5.55 p.m.	0.92	5.10 p.m.	5.25 p.m.	T.	0.40	0.69	0.74	0.79	0.85	0.89	0.91	0.91	0.91	0.91	0.91	0.91	
Portland, Ore.	18	.....	.....	0.21	.....	.....	.....	.....	.....	.....	.....	.....	0.21	.....	.....	.....	0.16	.....	.....	.....
Raleigh, N. C.	13	6.00 p.m.	9.45 p.m.	1.71	6.55 p.m.	7.30 p.m.	0.06	0.08	0.33	0.88	0.98	1.12	1.18	1.23	1.23	1.23	1.23	1.23	1.23	1.23
Richmond, Va.	12	4.30 p.m.	6.05 p.m.	1.00	4.45 p.m.	5.25 p.m.	0.01	0.26	0.48	0.55	0.62	0.66	0.71	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Rochester, N. Y.	27	.....	.....	0.18	.....	.....	.....	.....	.....	.....	.....	.....	0.18	.....	.....	.....	0.13	.....	.....	.....
St. Louis, Mo.	16	2.24 p.m.	8.11 p.m.	1.28	5.14 p.m.	5.58 p.m.	0.34	0.07	0.17	0.23	0.51	0.66	0.77	0.82	0.85	0.87	0.87	0.87	0.87	0.87
Do.	25-26	10.10 p.m.	5.45 a.m.	0.88	1.20 a.m.	2.20 a.m.	0.01	0.03												

TABLE XI.—*Excessive precipitation, by stations, for June, 1898.*

Stations.	Monthly rainfall 10 inches, or more.	Rainfall 2.50 inches, or more, in 24 hours.		Rainfall of 1 inch, or more, in one hour.		
		Amt.	Day.	Amt.	Time.	Day.
<i>Alabama.</i>						
Evergreen		Inches.	Inches.	Ins.	h.m.	28
Goodwater				2.00	1 00	
Lock No. 4				2.15	1 20	27
Newton				1.56	1 00	18
Selma				1.75	0 55	2
Talladega				1.50	0 30	2
<i>Arkansas.</i>						
Conway				1.23	1 00	13
Dardanelle				1.92	1 00	14
Fulton				1.20	0 50	22
Hot Springs				2.75	18	
Jonesboro				1.44	1 15	1
Little Rock				1.62	1 00	1
Ozark	11.15			27		
Picayune				2.70	15	
Russellville				1.08	0 50	14
Warren				1.20	0 30	21
<i>Colorado.</i>						
Cheyenne Wells				2.76	8-9	
Lamar				2.80	14	
<i>Florida.</i>						
Brooksville				1.40	1 00	14
Earnestville				2.55	1 00	1
Fort Meade				1.32	1 03	1
Do.				2.53	18	
Do.				2.53	1 25	13
Lake Butler				1.96	1 15	18
Maccleeny				1.17	1 10	29
Plant City				2.58	20	
Switzerland				1.02	0 45	23
Tallahassee				1.20	1 00	25
Tampa				1.53	0 45	15
<i>Georgia.</i>						
Fleming				2.50	16	
Fort Gaines				1.26	1 00	3
Greenbush				3.84	12	
Lumpkin				1.14	0 30	19
Marshallville				1.31	0 30	12
Mauzy				1.15	1 00	1
Do.				1.19	1 00	24
Mount Vernon				3.00	21	
Savannah				1.21	0 50	19
Waynesboro				1.00	0 45	4
Westpoint				2.26	1 50	22
Do.				2.20	1 00	26
<i>Illinois.</i>						
Cambridge				6.50	22-23	
Chemung				4.31	24-25	
Chicago				2.50	25	
Cobden					1.12	0 20
Danville					1.00	1 00
Dwight					1.52	1 00
Effingham				4.55	16	
Elgin				5.00	25-26	
Equality					1.49	1 00
Galva				4.14	22-23	
Lagrange				3.73	24-25	
Loami				2.85	9	
Martinsville					2.18	1 15
Mount Vernon				3.25	26	
Palestine					1.22	0 30
Peoria					1.02	1 00
Rantoul				3.53	8-9	
Riley				4.40	24-25	
Tilden					2.05	2 00
Tuscola					1.92	1 10
<i>Indiana.</i>						
Jeffersonville				3.93	25-26	
Knightstown					1.07	1 00
Madison				3.33	9	
Marengo				3.17	25-26	
Princeton				3.85	26	
Terre Haute				2.96	9	
Vevay				3.00	9	
<i>Iowa.</i>						
Adin				2.80	10	
Do.				3.18	22	
Atlantic				2.93	21-22	
Bonaparte					1.76	1 00
Do.				3.69	8-9	
Centerville					1.93	1 00
Greenfield				12.48	2.71	
Larrabee					2.70	9
Ovid					3.00	22
Thurman					4.65	5
Winterset				11.13	2.53	10
Do.					3.08	23
<i>Kansas.</i>						
Atchison				2.77	5	
Burlington				3.50	26	
Dodge					1.24	0 25
Englewood					2.30	2 00
Eskridge				3.81	15	
Fort Scott				3.88	27	
Gove				3.85	3-4	
Halstead				5.30	7-8	
Lebo				4.67	26	
Linn				3.60	8	
McPherson				2.52	8	

TABLE XI.—*Excessive precipitation—Continued.*

Stations.	Monthly rainfall 10 inches, or more.	Rainfall 2.50 inches, or more, in 24 hours.		Rainfall of 1 inch, or more, in one hour.	
		Amt.	Day.	Amt.	Day.
<i>Kansas—Continued.</i>					
Manhattan		2.00		2.92	26
Morantown		2.51	12-13	3.22	8
Mouthope					
Newton		1.56	1 00	1.22	1 00
Ulysses		1.75	0 55	2.55	14
Waimego		1.50	0 30	2.67	8
<i>Kentucky.</i>					
Ashland					
Bardstown		1.92	1 00	1.00	0 30
Blandville		1.20	0 50	1.25	0 35
Do.					
Leitchfield		1.44	1 15	1.45	1 15
Lexington		1.62	1 00	1.45	1 00
Loretto					
Lyndon		1.08	0 50	2.60	25
Mount Sterling		1.20	0 30	2.50	16-17
Shelbyville					
<i>Louisiana.</i>					
Abbeville				11.00	
Alexandria		1.40	1 00	2.75	14-15
Bastrop		2.55	1 00	2.55	30
Calhoun		2.50	1 00	2.50	16
Donaldsonville		2.53	1 00	2.50	29
Do.					
Elm Hall		1.52	1 00	2.10	1 45
Farmerville		1.96	1 15	1.00	0 50
Grand Coteau		1.17	1 10	1.20	1 10
Houma		2.58	1 20	1.20	1 20
Jeanerette		1.02	0 45	1.75	1 00
Lafayette		1.20	1 00	1.20	1 00
Lake Charles		1.53	0 45	1.00	0 30
Mansfield		1.30	1 00	3.57	2 00
New Iberia		1.19	1 00	1.75	1 30
Do.				1.00	0 35
New Orleans		1.21	0 50	1.00	1 00
Oakridge		1.00	0 45	1.00	0 10
Plain Dealing		2.26	1 50	6.08	16
Do.				2.95	24
Plaquemine		2.26	1 00	2.60	15
Rayne		1.21	0 50	3.90	22
Ruston		2.26	1 50	2.71	16
White Sulphur Springs		2.26	1 00	3.18	29
<i>Maryland.</i>					
Mardela Springs				2.68	18-19
<i>Michigan.</i>					
Adrian				2.66	25
Agricultural College				2.50	25
Bay City				2.69	10-11
Charlevoix				4.72	24
Detroit					
East Tawas				2.70	25
Harrisville				2.60	24-25
Ivan				3.00	1 00
Lake City				2.60	24-25
Luzerne				2.60	24
Mancelona				3.05	24-25
Petoskey				2.88	24-25
Port Austin				4.20	25-26
West Harrisonville				2.50	24
Wetmore					
<i>Minnesota.</i>					
Alexandria				2.96	4
Koochiching				4.15	24
Newfolden				3.01	23
Pine River				11.39	1.92
<i>Mississippi.</i>					
Biloxi				10.75	3-50
Fayette				3.25	29
Hazlehurst					
Lake					
Do.					
Magnolia				10.08	3.08
Meridian					
Natchez				10.08	15
Vicksburg				1.63	1 30
Water Valley				1.40	1 05
Waynesboro				1.35	1 00
Windham				1.40	0 48
<i>Missouri.</i>					
Appleton City				4.10	26-27
Arthur				4.60	26
Avalon				3.90	26
Bolckow				2.60	25
Columbia					
Do.					
Darksville				3.18	14-15
Edgehills				2.50	26
Fairport				6.05	26
Farmersville				3.40	26
Fulton				3.68	26
Gallatin				10.10	5.50
Gordonville					
Ironton					
Jefferson City				4.52	26-27
Kansas City				2.81	26
Kidder				2.98	26-27
Lamar				10.58	8.11
Lebanon				2.74	15-16

TABLE XI.—*Excessive precipitation*—Continued.

Stations.	Monthly rainfall 10 inches, or more	Rainfall 2.50 inches, or more, in 24 hours.		Rainfall of 1 inch, or more, in one hour.		
		Amt.	Day.	Amt.	Time.	Day.
<i>Missouri—Continued.</i>						
Malden	Inches.	2.51	20	Ins.	h.m.	.....
Mansfield		2.59	26	1.20	1 00	26
Marshall		2.60	25-26			
Nevada		3.02	14-15			
New Palestine		3.54	26-27			
Oakfield		5.05	26-27			
Osceola		3.06	15	1.03	1 00	11
Phillipsburg		5.56	25			
Potosi				1.42	0 50	5
Richmond				4.00	0 45	15
St. Charles		4.51	15-16			
St. Joseph		3.07	4-5			
Sedalia		3.02	14-15			
Do.		3.20	25-26			
Shelina		2.60	26			
Unionville				1.16	0 50	7
Vickey		2.82	15			
Willow Springs		2.60	21			
<i>Nebraska.</i>						
Aurora		8.85	8-4			
Elba				1.00	1 00	4
Fairmont		2.65	13			
Fremont		2.68	5			
Geneva		11.02	6.25			
Hebron		3.06	4			
Lyons		2.51	9			
Nemaha				1.40	1 20	4
Omaha		2.04	9	1.01	0 57	9
Palmer		2.79	21			
Stanton		2.73	9			
Straug		3.75	4			
Tablerock				1.80	1 00	6
Wakefield		2.82	9			
Wisner		3.07	4			
Do.		2.63	9			
<i>New Jersey.</i>						
Ocean City		2.50	28			
Toms River				1.75	0 45	28
<i>New York.</i>						
Albany				1.29	1 05	13
Humphrey				1.40	0 20	18
<i>North Carolina.</i>						
Asheville				1.22	0 30	17
Fayetteville				1.35	0 45	21
Monroe				1.40	0 50	18
Raleigh				1.35	1 00	13
Sloan		2.65	21	1.26	0 39	16
Do.				2.66	2 25	21
Wilmington				1.75	1 00	21
<i>North Dakota.</i>						
Fort Yates				1.67	1 00	20
Hamilton		3.02	5			
Langdon		3.17	24			
Meiville				1.80	1 10	21
Towner		3.48	23			
University		3.00	23			
<i>Ohio.</i>						
New Waterford		2.80	19			
<i>Oklahoma.</i>						
Jefferson		2.51	14			
Toledo		2.50	16			

TABLE XI.—*Excessive precipitation*—Continued.

Stations.	Monthly rainfall 10 inches, or more	Rainfall 2.50 inches, or more, in 24 hours.		Rainfall of 1 inch, or more, in one hour.		
		Amt.	Day.	Amt.	Time.	Day.
<i>Pennsylvania</i>						
Aqueduct	Inches.	2.50	19	1.00	0 48	2
Elwood Junction						
<i>South Carolina.</i>						
Allendale				1.20	0 15	17
Charleston				1.02	1 00	21
Cheraw				2.18	1 30	20
Darlington (near)						
Pinopolis		10.68	4.18	4.08	21	
Do.				3.60	20-21	
Shaws Fork				2.70	15-16	
Smiths Mills				3.94	15	16
Trial				3.26	2 35	16
Winnisboro						
<i>South Dakota.</i>						
Gary		2.50	30			
Goudyville		3.20	30			
Mellette		3.80	30			
Millbank		2.65	30			
<i>Tennessee.</i>						
Chattanooga				1.16	0 41	26
Elizabethhton		8.50	18			
Erasmus				1.28	0 50	19
Milan				1.25	1 00	28
Nashville				1.02	1 00	10
New Market				2.18	2 00	26
<i>Texas.</i>						
Conroe				1.45	1 00	11
Estelle				1.62	1 00	5
Do.				1.54	0 30	11
Fort McIntosh				1.70	1 00	10
Fruitland		2.72	7-8			
Hale Center		2.58	15			
Hewitt				1.52	1 00	16
Junction				1.10	1 00	4
Lampasas				1.36	1 10	12
Marshall				1.30	1 00	13
Do.				1.85	1 00	14
New Braunfels				2.19	1 30	30
Palestine				1.92	1 00	6
San Antonio				1.36	1 10	12
San Marcos		2.75	11-12	1.78	0 52	11
Temple				1.27	0 40	12
<i>Vermont.</i>						
Vernon		3.27	13			
<i>Virginia.</i>						
Fredericksburg				1.14	0 30	28
Lexington				2.34	1 30	15
Maidens				1.25	0 50	12
Richmond				1.00	1 03	12
Westpoint				1.20	1 00	13
<i>West Virginia.</i>						
Grafton				1.11	0 50	17
Parkersburg		2.96	27-28	1.44	1 10	27
<i>Wisconsin.</i>						
Beloit		6.55	24			
Brohead		3.02	24			
Delavan		4.80	24			
Gratiot		6.94	24			
Meadow Valley		2.55	10			
Medford						
Sharon		6.00	24			
Spooner		8.31	2-3			